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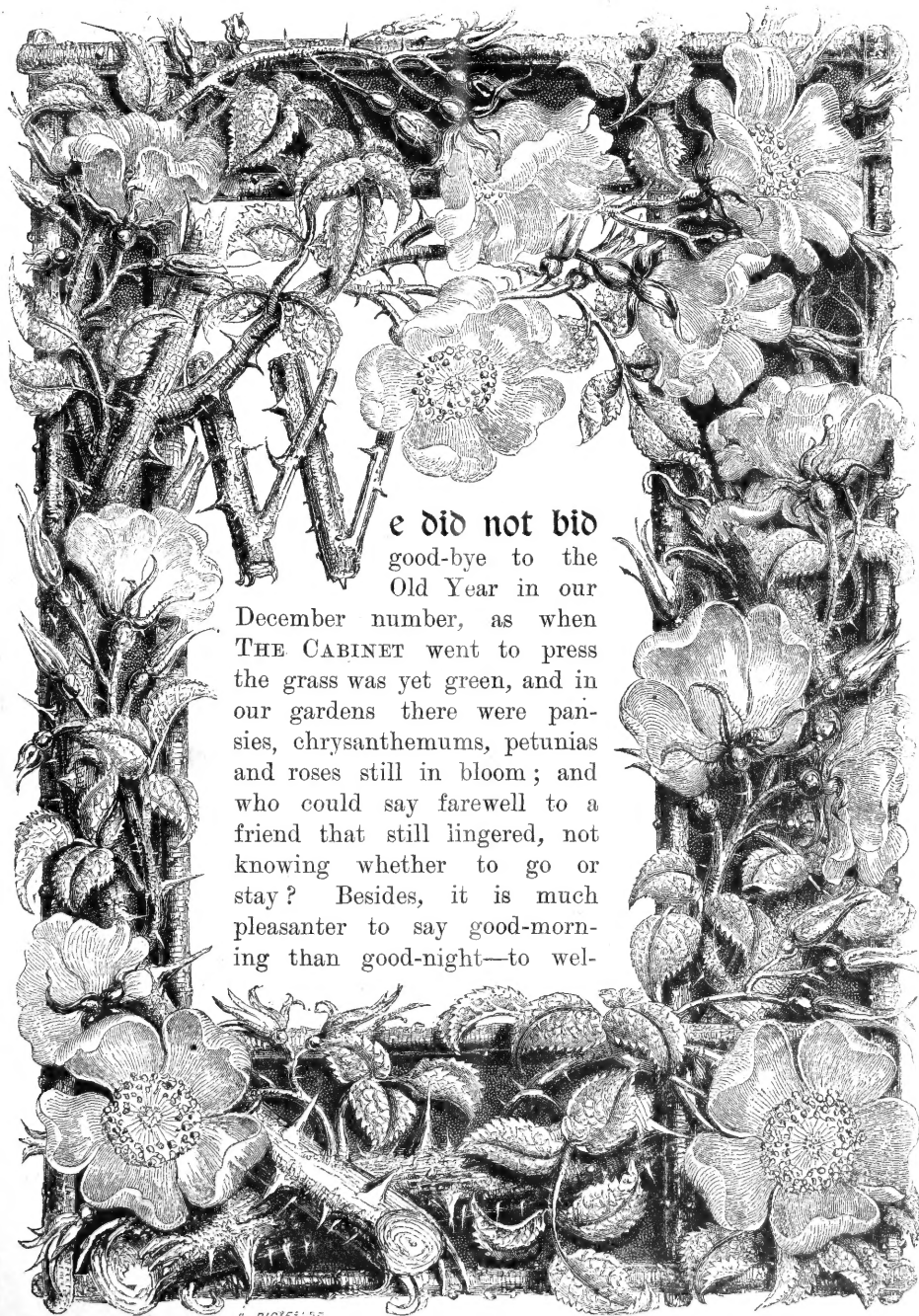


LADIES' FLORAL CABINET.

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No. 1.



come rather than part with a friend so dear. We sincerely hope our readers have had a "Merry Christmas"—merry in the broadest sense of the word, merry from within rather than from without, from what each one has done rather than from what has been done for him. And we now wish everyone a "Happy New Year." We have journeyed together so long that this salutation is not a mere matter of form, but a hearty greeting between friends; for it is thus we would recognize every writer for, and reader of, THE CABINET.

The new year brings with it a bundle of suggestions; it recalls the past and borrows from past experiences knowledge that is to be applied in the future. On the birthday of a new year we seem to look farther back and to see farther forward than usual. In gardening operations this is very needful. The past and future in the life of plants is an endless chain presenting but a single link at a time; that single link is the present. The strength, beauty and happiness of the present are inseparably bound up with all that has gone before and with much that will come after. The old year is gone, but we are not done with it; the reapings in the seasons to come will, in a great measure, depend upon the sowings and plantings which have already been made. We trust the past year was one of gladness to most of our readers. Doubtless it was sad to some, but now it is gone it seems a dear old year to us all. We part with it in sadness, but welcome the new with cheerful hope. The journals of horticulture do not record a year where there has been greater, if as much, progress in all that pertains to horticulture and floriculture as the past. More new roses, geraniums, carnations, chrysanthemums and gladioli worthy of special mention have been introduced than in any previous year; and all these new forms have received kindly greetings. Horticultural and agricultural societies have done more to encourage floriculture than ever before, and their encouragement has been fully appreciated. Flowers are no longer luxuries—they are necessities; there is a desire in every household that cannot be satisfied without them. And right here the Society of American Florists must be noticed, as it is more practical, consequently more useful, than any, if not all, others in this country. We welcome a society that has sufficient intelligence to make its journal of proceedings valuable for educational purposes,

But now a few words for the future, which is spread before us as a clean, unwritten page. We propose filling the blank from month to month with directions and instructions, plain, simple and accurate, so that those who know little or nothing of gardening may know much, and those who know much may learn more, to the intent that every garden, large or small, may be to its possessor such a thing of beauty as to be a joy forever.

A Happy New Year! We have entered upon the living present. "Let the dead past bury its dead." Only our dead are not dead, they but sleep. Cradled in storm, fettered with frozen chains, covered with snowdrifts, they sleep on and take their rest. The golden aconites, the drooping snowdrop, the sweet violet, the brave anemones and other children of the wintry winds keep their cold vigils over the sleeping flowers; and when they close their eyes others take their place to keep watch and ward over

all until the joyful voice of spring is heard, calling all forth from their beds to a resurrection of beauty and glory. Until that time comes it is ours to work and wait in faith, nothing doubting that each of the sleeping beauties will arise in due time all the sweeter, the stronger and the brighter for its long rest. With such thoughts let us enter upon our garden work for the new year. They will sweeten toil, refine and ennoble our minds, make us feel that the ground is holy and cause us to tread it reverently and to handle our plants lovingly, tenderly, gently, as we would a sleeping infant.

At this point we wish to say a few words to such of our readers as have but little *real* knowledge of ornamental and flowering plants and their culture. The taste for flowers and the desire for a garden is on the increase; it develops with education and refinement. A flower garden is the result of the mind that has been educated to the higher appreciation of the beautiful; it is an outgrowth, it is a teacher, and at the same time it is the result of teaching. In all gardening operations there is a starting-point, as there is in all business operations, and it is an impossibility to succeed without commencing at the beginning. We most earnestly advise such of our friends as have but little knowledge of gardens and gardening to start slowly, avoid extravagance, do not cultivate beyond your knowledge. Commence with such plants as will succeed under adverse circumstances and learn from them how to grow other and more difficult subjects. Do not think because your neighbor spends hundreds or thousands annually it is necessary for you to do so. On the contrary, bear in mind that he is the best gardener that succeeds in securing all the garden affords at the least expense.

In the beginning start clean and you will have made a good start; continue to keep your garden clean and you will have won the race. In planting take some choice annuals, such as balsams, petunias, phlox drummondii, asters and mignonette, all of which can be furnished for fifty cents. Add to these a few good mixed gladioli, that will not cost any more, and you will have a beautiful flower garden—one that will afford you much pleasure and at the same time stimulate you to greater effort. It is well to bear in mind the fact that high-priced seeds, bulbs or plants are not necessarily the most beautiful. In fact, the price is not fixed because of their beauty, but because of their rarity. We would instance the *Lilium lancifolium rubrum*, one of the most beautiful lilies that ever grew, and which retails for about twenty cents: the variety known as *Melpomme*, a seedling of the above, sells for one dollar, and it is by no means a superior flower—in fact, we prefer the former. But the latter, a seedling, having received the Massachusetts Horticultural Society's gold medal, and the fact of there being but a small quantity of it in existence, gives it a value in the market to which its real merit does not entitle it. Again, the *Lilium longiflorum* is another low-priced and very beautiful bulb; its variety, *L. Takesima*, sells for five times as much. The only difference between the two is that the latter has purple stems and the unopened buds are purplish on the outside, the perfectly developed flowers being precisely the same; the difference in price is because of the rarity of

one and the abundance of the other. It is the same with all classes of plants; supply and demand regulate the price. We therefore say to beginners, start cheaply; buy twenty plants for a dollar instead of one, and when you have become thoroughly acquainted with the more common sorts and can manage them well, then you can safely indulge in some of the more expensive varieties.

There are many persons who have but little real interest in a garden at the start, but become successful and even enthusiastic as they grow acquainted with their plants and the attention they deserve. Such persons soon get hobbies, which they are very apt to ride at a furious rate until they get out of wind, and they want every variety of the steed which they are riding. Such men are

very useful; they get everything, and you can learn from them what *not* to get—information of far greater value than to know what *to* get. It is more important in all business transactions to say “no” rather than “yes.” The secret of success in gardening is selection—a knowledge of plants and their requirements before purchasing. Many things will succeed in a given locality; others will not; therefore, it is important to know the plant and the place you have for it. You may rest assured that where grass and weeds will grow flowering plants will, at least some sorts will, providing the weeds do not. We say, then, start cheaply until you know what you can do; then be governed by your taste and the means you have for gratifying it.

DECEMBER JOTTINGS.

THE WEATHER—Has been fine, open and capital for garden work. We have had thus far (December 5) occasional frosts, in two instances as much as nine degrees—with considerable wind and rain storms, but no snow.

THE FLOWER GARDEN.—In sheltered places sweet alyssum, Czar violets, Meteor marigolds, mignonette, *Pentstemon pulchellus*, spring-sown intermediate stocks, late summer-sown annual larkspur, tritomas (large plants transplanted last August), summer-raised pansies and snapdragons yield a few flowers. But the season of outdoor flowers is past, and the few late stragglers that remain do not add much to the beauty or decoration of our gardens.

FLOWER BEDS AND BORDERS.—Perennial plants have been cut down and some short manure spread over their crowns. Annuals have been cleared away and all is left clean and neat. Where a lot of seedlings come up about the old plants, as in the case of larkspur, coreopsis and calendula, I leave the ground undisturbed till spring, when I can save as many of the young plants as I wish.

SOMEWHAT TENDER PLANTS.—I gathered my hollyhocks and Canterbury bells into patches by themselves and put a heavy covering of dry oak-leaves over them and scattered some thatch over the leaves to keep them from being blown away. It won't hurt lilies, as *L. longiflorum*, *L. auratum* and other uncertain kinds, if treated to a heavy winter mulching of leaves. Many pentstemons enjoy it; so do *Anemone japonica*, *Plumbago Larpenæ*, *Stokesia cyanea* and the like. Of the double white feverfew I prefer raising some fresh plants from slips every year to keeping over old plants by mulching them. Chrysanthemums are past for a season. I have cut them over, lifted the clumps and set one of each kind, closely packed into a cold frame, in which they will remain until late spring, when I will lift, divide and replant them.

THE LAWNS.—These have been raked clean and rotted manure spread over part of them. Chicory, white-weed, wild turnip, mulleins, or other objectionable weeds should be pulled out. Do not let cows or horses run over the

lawns in soft weather in winter, nor allow carts or carriages on them when the ground is not frozen solid, else ugly impressions that the roller cannot well erase will be left on them.

TREES.—While deciduous trees are bare of leaves and clearly display their exact proportions is the proper time for pruning. But always avoid heavy pruning. Don't let your garden trees run up for timber in forest fashion; you want an umbrageous head rather than a tall, clean trunk. Have an eye to a well-balanced head and a beautiful and symmetrical form throughout. Avoid unnatural forms. Assist, but do not ridicule nature. We often find Norway spruces sheared all around by way of “fixing up nice,” but they are not nice; on the contrary, they are hideous abominations.

SHRUBS, DECIDUOUS.—Prune into good shape; this consists of a moderately thin flowing habit, and an eye to preserving a good supply of firm, young wood. But again avoid much cutting away or shortening of the wood; a little thinning usually is all that is necessary. The African tamarix, Japan quince, forsythia and other early bloomers need very little, if any, pruning now; better let them alone till after they have blossomed, then prune them. They will have time enough to make good wood before the summer ends.

EVERGREEN SHRUBS.—Don't prune them in winter; in fact, don't touch them. If the sorts are tender or very choice and exposed to winds, a little shelter will save them greatly. In the case of arbor-vitæ, golden yews, retinisporas and other close growers, tie the main branches with marline or other stout cord, so that snows shall not weigh down the branches and lay open the hearts of the bushes. Don't let heavy snows lay upon or bend down the branches of your evergreens so long as you have a pair of rubber boots to help you through the snow, and a long bean pole with which to shake the snow off the bushes. I put a layer a foot deep of dry oak-leaves over the surface of our rhododendron beds every winter.

SOMEWHAT TENDER EVERGREENS.—*Euonymus japonicus*, *Cunninghamia sinensis*, Irish yew, Dovestone yew, *Podocarpus japonica*, deodar, Spanish laurel and

others that are barely hardy enough to survive our winters unscathed, are benefited by a slight protection. I place barrels or melon boxes over the small plants and set box-like board shelters around some of the larger yews, but for most plants I prefer to set some stout stakes around them and to these tack sheets of calico. The calico that has been used by printers for cleaning their presses, and which costs very little indeed, is what I use. In the case of the most tender sorts, as *Photinia serrulata*, I fill up loosely inside the calico with a good body of dry oak-leaves, and over the top tack a cap of calico to keep out the wet. My neighbor, Mr. Barlow, has a goodly-sized plant of *Magnolia grandiflora* that he thinks must have been grown as a greenhouse pot-plant for thirty years, but which, some years ago, he planted out in his grounds. He ties the branches together and protects the tree with straw in winter. It blossoms beautifully every year.

HOUSE PLANTS IN JANUARY.—Give lots of water to callas, carnations and others in active growth; water sparingly all plants that are in an inactive state. Remove decayed leaves and flowers as they appear and cut back to the living wood geraniums, lantanas, shrubby calceolarias, abutilons, &c., that have been taken in from the out-door summer-garden. Don't re-pot plants now. Don't disturb the pots or boxes of slips you put in for next

spring's use. If you have proper convenience for their present and later care, the sooner you get up a stock of vincas and *Centaurea ragusina* for next summer's use the better.

THE GREENHOUSE.—Attend to watering and cleaning. Ventilate a little every fine day; open early and but a little at a time, and shut up early. A high temperature caused by fire heat is injurious to ordinary greenhouse plants. When poinsettias cease blooming lay the pots on their sides, under the benches or elsewhere that is moderately warm and dry. Chinese primroses, cyclamens, speciosa fuchsias, scarlet geraniums, callas, carnations, begonias of several sorts, bouvardias, nasturtiums, Paris daisies, libonias, Roman hyacinths, abutilons, pansies and violets should be in good bloom in midwinter.

COLD FRAMES.—There is no good gained by letting the plants in these get frozen. Wrap them up well, and in the event of severe frosty weather or a snowstorm they may remain covered up for several days at a time. Of course, in the case of pansies and violets that you want flowers from all winter long, you should remove the sash covering during bright, sunny days, even if frosty. When you merely wish to keep over the plants from fall to spring, fill up over the plants with dry leaves and put the sashes on to keep them dry. WM. FALCONER.



CHRISTMAS ROSES.

NEW CHRYSANTHEMUMS.

THE year 1885 will long be remembered as the most remarkable season of this queen of autumn, and the readers of THE FLORAL CABINET have been kept well informed on all the most important exhibitions and the most popular varieties. The new varieties, including the European ones of 1884 and 1885 and the American seedlings, have been very numerous; not less than two hundred of the former and one hundred and fifty of the latter have passed our inspection. Beginning with those already in commerce, the following are really acquisitions: *Beauté des Jardins*, rose; *Belle Paule*, white and rose; *Brise du Matin*, silvery lilac; *Christmas Eve*, superb white; *Colibri*, rich crimson; *Cullingfordii*, bright red; *David Allen*, yellow and crimson; *Golden Rayonnante*, yellow; *Gloriosum*, lemon; *H. Waterer*, yellow and bronze; *Julius Cæsar*, red orange; *John Laing*, deep maroon; *Mrs. C. Wheeler*, crimson, extra fine; *Pietro Diaz*, magnificent red; *President Cleveland*, light blush; *Roseum pictum*, rose and white; *President Arthur*, silver rose, immense flowers; *Syringa*, lilac and silvery blush, fine.

Other Varieties Lately Imported.—*Mme. L. Fabre*, silvery rose; *Domination*, fine white; *Jupiter*, the brightest of all reds; *Lakmé*, brick-red; *M. V. Morel*, blush; *Commandant Rivière*, bronze and red; *Tubiflorum*, blush, pointed with pink.

The American seedlings, which should be added to every collection: *Brasen Shield*, a bronze (Chinese); *Amber Rosary*, amber (Chinese); *Bessie Pitcher*, pink

(large anemone); *Sam Sloan*, creamy-white (Chinese); *Thorpe Junior*, a lovely yellow (anemone); *Edna Craig*, white, with small anemone centre, new type; *Fennie Y. Murkland*, yellow and rose; *F. T. McFadden*, mauve, a new color; *Mr. Norris*, deep amaranth; *Mrs. H. Beach*, lemon yellow; *Porcupine*, form like the needle asters, terra-cotta colors; *Nellie Blye*, golden yellow; *Mrs. W. Hamilton*, snow-white; *Mary E. Fuller*, incurved white. *Mrs. Lord*, a plumed yellow (Japanese); *Grover Cleveland*, crimson and gold; *Laurel Hill*, silvery pink; *Claire Robertson*, buff and silver.

The above have all either been awarded certificates of merit or medals. It seems rather an imposing list of new varieties to add to the already beautiful collections of older favorites, but the march is onward and the end justifies the means. The autumn of 1886 will see chrysanthemum exhibitions far surpassing any ever held. Some of the horticultural societies are already forming schedules of premiums on most gigantic scales. We hear of five hundred dollars to be offered in one premium for twenty-five plants; fifty dollars for one hundred cut-blooms and others in the same proportion. When we consider the progress made during the past four years we are astonished; a few plants in the old Republican Hall, which could have easily been placed in a space twenty-five feet by forty feet, was the beginning of the chrysanthemum fever in New York.

JOHN THORPE.

QUEENS, N. Y.

THE CHRISTMAS ROSE.

(*Helleborus Niger*.)

LIKE many other plants, this has failed to receive a just and proper recognition. It is one of those rare and beautiful forms that has to stand aside because its cultivation is attended with some little trouble, although by no means difficult. In our climate it requires the protection of a frame during winter, but that is a small outlay, indeed, for the pleasure it gives. We know of plants in a city garden that bloom in winter—about the holidays—as profusely as do the petunias in summer, and all the care they get is a soap-box with a pane of glass on the top. This frame is put over the plant about the first of December, and a little dirt thrown around the sides, which is all the care required to produce flowers of the greatest beauty at a season when they are, or should be, greatly appreciated.

This plant, though rare here, is commonly cultivated in England, and has been for many years. Mrs. Loudon in speaking of it said: "Everyone knows that first harbinger of spring, the Christmas rose; but few people are aware how very well it looks as a window plant. In the

open air the delicate texture of its flowers is often injured by the frost or melting snow, which so often covers the ground at the dreary season when it appears; but when kept in a sheltered place, such as a room or greenhouse, it becomes a very ornamental plant. The calyx of the Christmas rose consists of five large, white sepals, which are delicately tinged with pink. The petals are small and tubular, but not ornamental, as they are of a dingy green. They are, however, little seen, as they are nearly hidden by the numerous stamens which surround the eight or ten carpels that grow erect and close together in the centre of the flower. The leaves are very deeply cut and the segments are disposed in a palmate manner, so as to look like separate leaflets. The species takes its name from the black bark of its underground stem. It is a native of the Apennines, whence it was introduced into England before 1596. It will grow in any soil or situation, but it prefers a dry soil and a situation open to the sun. It is propagated by dividing the underground stem in summer, after the leaves have decayed."

ROSE GOSSIP.

UP to the first of November, the prominent French and English horticultural journals had announced about fifty new roses for 1885-6, and as the lists were to be continued, the ultimate number will probably reach that of last year. Several of these novelties have been shown at the summer exhibitions with marked success, and have been awarded certificates of merit. This fact is a presumption in their favor, and may warrant a brief mention of such as appear to be promising sorts. The controversy regarding Da Costa's sensational rose of last year, the wonderful *Lusiadas*, warns us to be very guarded in accepting high-flown accounts of new flowers.

This vexed question still remains in dispute, although the weight of evidence goes to show that this much-vaunted flower is a barefaced fraud. Respectable firms, such as Ketten Frères, Soupert & Notting, and others, have protested in the strongest terms against the unprincipled trickery by which they were induced to pay ten dollars per plant for sickly specimens of the old noisette, *Celine Forestier*, and do not hesitate to inform Señor Da Costa that he is lavishly endowed with all those questionable though cute qualities that tradition, from time immemorial, has assigned as the special prerogatives of the natives of a compact little New England State. Da Costa, with a tenacity worthy of a better cause, still maintains that *Lusiadas* is the peerless and unapproachable (especially the latter, for no person has yet seen it) novelty he described it to be, brilliant chrome-yellow ground, with gorgeous crimson spots, but he fails to explain in a satisfactory manner the singular circumstance that the plants he sends out in response to orders should in every case prove to be *Celine Forestier*. He wrote a letter to the *Journal des Roses* in reply to the slashing criticisms of the French rosarians, but became so absorbed in side issues that he failed to throw satisfactory light on the vital point, or to extricate himself from a decidedly uncomfortable position. On the whole, he is in bad odor with his transatlantic confrères, and may for the future rest on his questionable laurels—and the five thousand dollars he is said to have realized from the sale of the spurious rose.

M. Joseph Schwartz, the well-known rose-grower of Lyons, France, died on the 11th of October last, at the comparatively early age of forty years. A man of singular energy of character, he raised himself, by studious application and unwearied industry, from an obscure position to the front rank of horticultural workers, and in a brief career has been the originator of nearly fifty roses in the different classes. Many of these have achieved enduring success, such as *Comtesse Riza du Parc*, *Mme. Joseph Schwartz*, *Camens*, *Duchesse de Vallambrosa*, *Marquise Adele de Murmais*, *Mme. Oswald de Kerchove*, *Secrétaire Nicolas*, *Reine Victoria*, *Duchesse of Edinburgh*, *Mme. Massicault* and others. The present season we have from him five new sorts—*Albane d'Arneville*, a hybrid noisette; *Souvenir d'Eugene Karr* and

Auguste André, two hybrid remontants, and two climbing hybrid remontants, fixed sports from the varieties *M. Boncenne* and *Pride of Waltham*.

M. Leveque introduces six new roses, all hybrid remontants with the exception of *Comtesse Horace de Choiseul*, a tea, a large, beautifully formed flower of a delicate rose-color, shaded with coppery yellow, said to be very distinct and vigorous.

The *Journal des Roses* gives a colored plate of another new tea-rose raised by Bonnaire, which was awarded two first-class premiums, a very full flower, perfect in form, brilliant china-rose color, with deep yellow centre. It is named *Souvenir de Victor Hugo*.

M. Pernet, of Lyons, introduces a hybrid remontant, also named *Souvenir de Victor Hugo*, which is said to be a very fine rose-colored flower. He also offers two new tea-roses.

M. Margottin, of Bourg-la-Reine, exhibited a new seedling hybrid remontant at the Paris Exhibition in June last, which was awarded a first-class premium. It is called *Raoul Guillard*, a very striking rose, brilliant vermilion-red, with amaranth shadings.

Two new French roses, destined to take and retain prominent rank in the rose world, are without doubt Lacharme's hybrid remontant, *Clara Cochet*, and Dubreuil's tea, *Marquise de Vivens*. M. Viviand-Morel, a gentleman fully competent to judge, speaks in the highest terms of these new flowers, which have received the highest prizes wherever exhibited. *Clara Cochet* is a very large, light-colored rose with brilliant, deep centre. *Marquise de Vivens* is peculiarly distinct in form, the broad petals recurved lengthwise like a scroll, bright carmine edges, growing paler toward the centre, and ending in delicate yellow. Its extreme elegance of form and charming combination of tints render it one of the most remarkable novelties of the season.

La Nantaise and *Gloire du Bouchet*, two hybrid remontants, have attracted much attention and are offered for sale by Scipion Cochet, though raised respectively by La Rocheterie and Boisselot.

Mr. Bennett exhibited in May last at the South Kensington show, two very fine new hybrid teas. One of them, *Ye Primrose Dame*, is a globular flower, pale yellow, with apricot centre and broad, rounded petals. It is deliciously fragrant and a prolific bloomer. The second variety, *General Gordon*, pure white, is a promising sort, though less compact than *Ye Primrose Dame*; both received first-class certificates. Another of Mr. Bennett's pedigree roses received a like distinction at the Crystal Palace Exhibition. This is a hybrid remontant, *John Laing*, somewhat in the style of *François Michelin*, a globular rose-colored flower, and highly perfumed.

William Paul & Son, of Waltham Cross, offer three hardy climbing roses, "seedlings from *Gloire de Dijon*, which bloom abundantly till late in the season; they are all red roses, but of different shapes, and distinct

shades of color, No. 1 being the lightest and No. 3 the darkest."

Mr. Taplin introduces a new American rose, *The Bride*, a sport from *Catherine Mermel*; it is pure white.

A correspondent of a French horticultural journal, in giving a list of successful roses of recent introduction, gives warm praise to Ellwanger & Barry's hybrid remontant, *Marshal P. Wilder*. With him the plant is very vigorous, the flower large, well-shaped and very beautiful.

Her Majesty will be the great sensation of the season in rose circles. Messrs. Evans, and Craig & Brothers, of Philadelphia, have secured the entire stock of this magnificent variety, and though now offered for sale for the first time, it has been before the public for several years, and wherever shown has received the most enthusiastic praise. The *Florist* and *Pomologist* gave a very fine plate of it as far back as 1880. Mr. Moore, the editor, congratulated Mr. Bennett as having produced "the finest light-colored rose yet raised." The *Garden*, *Gardener's Magazine*, *Gardener's Chronicle*, and *Rosarian's Year-Book* all unite in pronouncing it a magnificent acquisition to the rose list. The blooms are immense, often six inches in diameter, the form massive and globular, the color distinct and characteristic, an exquisite shade of pale rosy-salmon. The plant is perfectly hardy and of vigorous growth. Mr. Bennett exhibited three specimens in 1884, "each having shoots nine feet in height and two inches in circumference, the result of six months' growth from grafts." The *Garden* of February 14, 1885, says: "The Americans will be in possession of the largest rose ever raised, and one that will be sure to be sought for by growers on this side of the Atlantic."

All concur in ascribing to *Her Majesty* the very valuable quality of retaining its freshness and substance in an unusual degree, and the only discordant note in the pæan of praise is the lack of strong perfume, a defect, by the way, characteristic of several of our loveliest roses; witness *Baronne de Rothschild*, *Merveille de Lyon* and others, but their extravagant beauty silences criticism and makes ample amends for a shortcoming that would be quite unpardonable in a commonplace flower.

An English writer in the *Journal of Horticulture* relates his experience with the rose *A. K. Williams*, a variety that every season, since its appearance, has been

lauded to the skies. He considers it a very ordinary rose, which has been altogether overrated. Its failure in the hands of an amateur might be attributed to improper care or culture, but when such capable growers as Paul, Cant and others exhibit it in every form, and one can scarcely find a flower worth looking at, he thinks the cause of failure must be inherent to the variety. My own experience confirms his view. It is certainly the most miserable grower I ever saw, and the plant in my possession is not now as large as when I received it, while the flowers are poor and insignificant. Had it been furnished me by a certain American florist, instead of having come from Paul, of Waltham Cross, I should be inclined to think that the ubiquitous *Antoinette* was at her old tricks again, and had assumed another masculine rôle. I cannot advise any amateur to invest either hope or money in it; but I do strongly advise every grower to procure at once the moss *Cristata*. It is strikingly original, and beautiful beyond comparison. It is supposed to be a sport from *Rosa centifolia*, and was accidentally discovered by a botanist in 1826. He found it growing on the top of a ruined tower, the remnant of an old castle of the middle ages, in Switzerland. It was sent to M. Robbin, chief gardener at the Palais Bourbon, Paris, who placed it in the hands of the famous growers, Vibert & Portmer, and from their establishment it was soon thoroughly disseminated.

I discovered the past season that *Etoile de Lyon* is a grand rose, and was surprised at the remarkable qualities it displayed as a bedder. The plant, though but one year old, blossomed without intermission; its lovely great yellow roses were as fine, full, and perfectly shaped as ever appeared on a greenhouse "or any other stage."

I must mention one redeeming trait in the otherwise unsatisfactory order to which reference was made in the December issue. Authorities on the culture of the rose almost unanimously agree that it is extremely difficult to succeed in growing *Baronne de Rothschild* from cuttings, yet I received a small rooted cutting of that variety, which upon being planted in the open ground grew so rapidly that at the end of the season it had become larger and much thriftier in appearance than a budded plant of the same sort, which had been two years established, and produced the largest and by far the finest bloom that I have ever seen.

F. LANCE.

BEAUTIFUL STOVE CLIMBERS.

AMONG all the variegated stove plants there are few, if any, that have attracted so much attention as *Cissus discolor*, the exquisite markings of its leaves being very handsome. It is a climber easily propagated, and its subsequent management is equally easy. Cuttings made of the young shoots, consisting of some three or four joints each, put singly into small pots in sand and kept in a close, moist atmosphere in a brisk heat, form roots quickly, after which they should be inured to the air of the house, and moved into proportionately larger pots.

Use good, open, rich soil—either peat or loam will answer—as the plants are such free-rooters that they grow and do well in anything, provided it is not retentive of moisture, so that the large quantity of water they need can pass freely off. If to be trained on trellises, they should not be put on these until in the pots which they are for some time to occupy; consequently, in their younger stages, the shoots should be trained round a few sticks till they are large enough to be placed in the pots in which they are to be confined. One stopping will generally be



CISSUS PORPHYROPHYLLA.

sufficient to cause enough shoots to break to furnish the specimens sufficiently. A brisk stove temperature, with shade when the sun is powerful, is requisite to grow them well; shade is especially necessary in the case of *C. discolor*, the variegation of which cannot be preserved if the

plants are too much exposed to the sun. Large pots are required to grow the more vigorous kinds, such as *C. discolor*, which will fill a twelve-inch or fifteen-inch pot in six or eight months after it is struck. When to be planted out so as to cover a pillar or portion of a wall in the stove, for which purpose they are well adapted, the plants may be turned out as soon as they have filled six-inch pots with their roots.

In all stages of their growth they require to be plentifully supplied with water and syringed overhead daily during the growing season. In the winter they may be cut in freely to keep their heads in bounds. If grown in pots, they may, as soon as they have broken again into growth, be partially shaken out and fresh soil given. When planted out, they soon exhaust the material in which their roots are placed, and should be assisted by surface dressings of good loam, enriched with decomposed manure. The plants can be used for filling large baskets for hanging up, where they can be kept in a stove temperature, without which they make little progress.

There are a number of species in cultivation, but the following find most favor with the generality of cultivators: *C. discolor*.—This is a climbing plant from Java, of very free growth, with oblong cordate leaves, deeply ribbed, ground color deep green, beautifully marbled with white, and while young with pinkish red. *C. gloriosa*.—Another free-growing climber, with velvety green leaves, veined with red. Introduced from Costa Rica. *C. Lindenii*.—Also a climber, like *C. discolor*, with tendrilled branches; the leaves are medium-sized, bright green, mottled with white. It comes from Colombia. *C. porphyrophylla*.—A free grower, very suitable for covering a wall in a hothouse where there is not so much light as most plants require. A native of India, not so handsome as the preceding. Thrips, aphides, mealy bug, and scale will all live on these plants, but the daily use of the syringe will usually be found sufficient to keep the least troublesome in check, and should bugs or scale affect them sponging must be resorted to.—*Gardening Illustrated*.

OUR NATIVE CLIMBERS.

CLIMBERS add greatly to the charms of home and home grounds, and nothing will hide unsightly objects so effectually and quickly; piles of rocks, old fences, rough stumps and tree trunks can be covered and transformed into things of beauty, and our plain, square houses, with their straight lines, prominent bays, and stiff piazzas, can be made attractive by cutting off the square angles and corners with graceful festoons of vines, and making of the piazza a bower with a mask of green vines and flowers.

In the more pretentious houses planned by our modern architects observe the efforts for effect and contrasts in wood, stone and brick, and how difficult it is to bring out points without marring the symmetry of the surroundings; a framework of vines would greatly aid in giving

prominence to such details as it is desirable to make noticeable.

The house is the central point in private grounds and all planting of trees should be made with reference to views to or from it. At a distance we get the effect of the whole; the fine details are not seen, and if they are relied upon to give a pleasing character to the house, it will suffer unfavorable criticism from such a point; but a suggestion of the finish is made if there are lines and festoons of vines in their proper places.

The objection most often made to having vines about the house is that they are in the way when painting or repairing is to be done. If a practical method of removing them without injury were suggested this objection would not stand in the way of so many. This can be done

if proper supports are made for the vines to climb upon.

For the piazza or screen, where low twiners are to be placed, a light and strong frame of wood should be made and covered with coarse wire-netting; the screen should then be attached to the building or to firm posts with screws in such a manner that the support and the vines attached to it can be easily removed and laid back when necessary. A vine will stand considerable bending if the bends are not made too short, and so can be removed far enough from a building to allow for all necessary work behind it.

Where strong-growing vines are to be carried long distances or high up on the corners or in the angles of houses, a strong iron rod should be used, standing away from the house some inches and attached to iron braces at top and bottom, and at intervals along the length, in such a manner that it and its weight of vine can be detached and held away from the building.

We often see great heavy trellises made strong enough for a foot-bridge, on which a delicate vine is expected to climb; the pieces are so close and so large that the tendrils cannot find a chance to attach themselves properly, and the vine hangs off in bunches here and there, showing a large amount of trellis and little vine where we want all vine.

Any strong twining plant, such as the wistaria, would find its way up the iron rod and its supports; while any slender twiner and tendril bearer would cover the wire trellis.

Those climbers that are attached by viscid disks, as the Japan woodbine (*Ampelopsis Veitchi*) are not suitable to place where painting or repairing is to be done, for the disks will stick to any surface and stay there.

We have many beautiful native climbers that are more hardy and attractive than the foreign kinds; some are already appreciated and largely planted, others equally as desirable are seldom in ornamental grounds.

The Virginia creeper (*Ampelopsis quinquefolia*) is one of the most popular and best adapted for general uses; it has a dense and richly-colored foliage; the dark, glossy green of the older leaves is relieved by the light green of the young shoots, with their gracefully curved tips. It is adapted to all good soils, and is perfectly hardy in any exposure, even to the salty wind and spray from the ocean. The long, graceful stems are rapid-growing and easily trained in any direction, and it will cover a large surface with a dense screen of foliage. The flowers are not very conspicuous, but the loose clusters of blue fruit, with their scarlet stems, are quite attractive for some weeks after the foliage has fallen. This plant has two distinct varieties; one clings by viscid disks, as does the Japan woodbine, and will cling to smooth surfaces tenaciously, is slender-growing, with reddish bark, while the other climbs by simple tendrils like the grape, and cannot be attached to smooth surfaces except artificially, and is stouter-growing, with gray bark.

The brilliancy of the autumn foliage of the Virginia creeper is unexcelled; even among the brilliant colors of the maples and oaks it is conspicuous, the intense scarlet in dark and light shades is beautifully blended

with yellow. Many a hard, rough wall and ugly stump is transformed into a thing of beauty with the graceful festoons of the Virginia creeper.

Another valuable climber is the "bitter sweet" (*Celastrus scandens*) and its chief attraction lies not in the foliage but in the fruit, for as soon as the frost has given the yellow clusters a severe pinching the berries burst open their hard little coats, throw them back, and disclose their bright orange lining and seeds within; and these cling to their stems for a long time in the winter, and make a brilliant display when their surroundings appear dull and sombre.

This plant, like the Virginia creeper, is a rapid grower and adapted to a great variety of soils and situations. It does not festoon so gracefully as the last, and has a foliage of a lighter shade of green, that turns a uniform bright yellow shade in autumn.

We have a native wistaria (*Wistaria magnifica*), with a rapid but slender growth and brownish bark; the flowers are nearly equal to the Chinese wistaria but not so freely produced, and it is often sold for this variety although quite distinct, for the Chinese has vigorous and stout shoots and gray bark, but it is not as easily propagated and so is more expensive.

The American and Chinese wistarias both have white flowered varieties, which are very pretty but not so vigorous as the types.

Our native wistaria is a rapid climber, often growing fifteen feet in a season and well suited for training long distances. It flowers in June and again sparingly in August or September.

The "trumpet vine" (*Bignonia radicans*) is not graceful, but an old plant with coarse, rough trunk, and straight branches sticking out from the bunch of light green foliage, is interesting, and when loaded with its cluster of gorgeous flowers it is showy. The young shoots will cling to a rough surface by means of its rootlets. The plant is deep-rooted, and once established in a garden, it stays with a pertinacity that is little checked by cutting, digging or pulling. A piece of a root will make a plant, and a plant will push its roots below the efforts of the average digger.

The "cross vine" (*Bignonia capreolata*) is quite a different plant from its relative last mentioned. It is a delicate vine with pretty foliage, numerous twisted tendrils, that give the plant an interesting appearance, and serve to attach it to smooth surfaces quite effectually. Unfortunately it is not very hardy here in Massachusetts.

Another notable climber is the Dutchman's pipe (*Aristolochia sipho*), a magnificent plant with an appropriate name, when its peculiar pipe-shaped brown flowers alone are considered. In a rich soil this plant is a rapid grower. The stems are smooth and dark green; the great heart-shaped leaves are very effective, and, trained on a trellis, they overlap each other and form a perfect screen.

There is another Dutchman's pipe (*Aristolochia tomentosa*) that is often sent out when the plant of that name is called for, and with which the purchaser is liable to be disappointed if he expects the large leaves and rapid growth of the first named. It has a smaller leaf covered with a slight white fuzz, and is quite a slender grower. It

is a neat climber, and covers a low trellis very nicely. The underground stems are liable to spread a little more than is desirable, and are inclined to be troublesome now and then, but for all this it is a desirable climber.

Another slender climber is the "moonseed" (*Menispermum Canadense*), so called from the crescent-shaped seeds in the black, grape-like fruit that hangs in clusters. It has a dense foliage, the leaves are roundish, with wavy margins, and attached to glossy brown stems that twine very prettily over stumps, rocks and low trellises. The stems spread through the ground in the immediate vicinity of the plant, but not so as to be very troublesome.

There are other climbers in the grape family besides the one mentioned (the Virginia creeper) that are desirable. The *Vitis riparia* is a rapid grower rather coarse, but suitable for covering large surfaces. The flowers have the exquisite odor of the mignonette. *Vitis indica* has an oval-pointed leaf with the edges toothed—not lobed like other grapes. It is a rapid grower, with slender stems and dense foliage that holds on quite late in the season. The berries are very attractive; they are in loose clusters, and nearly every berry has a distinct color, white, red or blue, and shades between.

There is also another grape, *Vitis bipinnata*, with a beautiful fern-like and rich, glossy green foliage, of a charming bluish shade. It is a beautiful plant, but is not entirely hardy. It would hardly be classed among climbers, as it does not twine much and the tendrils are not very numerous, yet it will find its way up the side of a stone-wall or trellis quite well.

Cocculus Carolinus is another Southern climber with yellowish green, triangular leaves, having rounded corners and delicate sprays of white flowers; it is a slender grower, and twines over low supports very prettily. Another climber, the "supple Jack" (*Berchemia volubilis*), is not so graceful and pretty as the last; the stems are

purplish and twining, the leaves oval, dark green, and prominently veined. It does not twine to a great height.

The yellow Southern jessamine is not considered hardy here, yet a plant once established in a soil where it ripens its wood early and well, will live for some years and produce its delightfully fragrant flowers.

The last four varieties are not in general cultivation, but they are native climbers worthy of a place in our gardens.

Among the *Loniceras* are some of our finest climbers, both foreign and American. Our *Lonicera grata*, with fragrant white and yellowish flowers in bunches, is rapid-growing and graceful, with a pleasing foliage. We have two yellow-flowered species—*Lonicera flava* and *hirsuta*. The first has showy bunches of large flowers and foliage similar to the "trumpet honeysuckle," and the last has similar flowers which are not so showy, but the foliage is hairy, and this gives the plant an interesting character.

The best known of our native honeysuckles is the *Lonicera sempervirens*, or "trumpet honeysuckle." This and its yellow variety have long been in cultivation, and are worthy of a place among the best climbers. There are few flowers with brighter colors; it is rapid-growing and graceful, and the flowers stand well out from among the foliage, which is of a glaucous green. Red berries are formed in bunches after the flowers are gone, and make the plant attractive for a long season.

Nearly all climbers are easily cultivated, and only require a good soil. It is important to give direction to the shoots while they are young if they are desired to cover certain objects, and a little training will make the plant in better condition if at any time it is necessary to move it.

Climbers, as well as other shrubs, need pruning more or less—enough to give strength to leading shoots if a surface is to be covered, or more severely to force flower-buds if flowers are desired.

WARREN H. MANNING.

FLOWERS AND FLORISTS.

ALTHOUGH the Bureau of Labor Statistics has nothing to say about the people who supply plants and flowers to rich and poor alike, horticulture is a great and growing industry, to which both our climate and our people give substantial encouragement. According to the latest information, there are rather over 8,000 florists established in business in this country, who, with their work-people, make a considerable showing in the population. The number of native-born growers increases yearly, for though England contributes the largest quota to the trade, with Germany and France following closely, Americans are now awaking to the possibilities of the business. Allowing 400 feet of glass-covered surface—a very low estimate—to each florist, would give a total of 3,200,000 square feet, or 630 acres. Last year the trade sold 24,000,000 cut roses, and 120,000,000 carnation flowers. Quite a respectable showing, is it not?

New York is undoubtedly the centre of the trade, not that the city consumes all of the flowers sent in, but here the commission merchant comes forward, and sends his

consignments of flowers to distant cities with as much indifference as if they were so many barrels of mess pork. Every morning the early boats and trains bring men and boys from Long Island, Staten Island, New Jersey and up the Hudson, bearing bulky and mysterious baskets, covered with black oilskin, within whose depths repose enough beauty and fragrance to transform the busy, workaday city into Paradise regained.

The transfer and packing is a very important part of the trade. Of course, many of the flowers are sent by express, especially when grown a considerable distance from the city, but the express company is often tardy in delivery, and, as most of the wholesale buying, both for city and outside trade, is over by eight o'clock in the morning, the florist suffers both loss and inconvenience by such transportation. During the summer months roses and such perishable blossoms are cut before five o'clock in the morning, carefully packed, their stems surrounded by broken ice. They arrive in New York soon after six, and before eight are speeding toward Newport,

Saratoga, Long Branch, or wherever Dame Fashion sends her votaries. In winter the flowers are carefully wrapped in cotton batting and numerous folds of paper, as, of course, the least touch of Jack Frost's icy fingers would render them unsalable. Packed by an experienced florist, the daintiest and most fragile blossoms will travel long distances without the slightest disfigurement. You may buy a bouquet in Detroit or St. Louis whose flowers first saw the light on the sunny slopes of Union Hill, whence they were transferred to New York, and so to their final resting-place.

Ten years ago the people of New York asked for Boston tea-roses; now the Bostonian gets many of his buds from New Jersey, for that business-like State stands pre-eminent in floriculture. In Union Hill and Scheutzen Park it is sometimes difficult for the casual observer to judge whether beer gardens or florists' establishments form the greater industry, but careful consideration leads one to the conclusion that there is one saloon to every three florists. It is a district where stone-throwing is regarded as a capital crime. Along the line of the Delaware, Lackawanna and Western Railway we find many florists' places, especially around Madison and Summit.

Looking at the magnitude of the trade, the reader may ask: Where is the New York Flower Market? And Echo alone sadly answers, where? It is an almost incredible fact that the only market where buyers and sellers may meet on equal terms is a little coffee-house at the East River Thirty-fourth street ferry. There the small growers, who peddle their stuff instead of selling it through the commission merchant, and the cranky growers, who maintain a guerilla warfare with the same, sell to the retailers of the city trade. The commission men often patronize "The Ferry," as it is called, when unable to fill their orders through their regular consignors.

It seems most discreditable to New York and its authorities that we have no flower market. Is not the city rich enough or enterprising enough to establish a cis-atlantic Covent Garden? To the wise ones this may seem easy enough; after obtaining the favoring sanctions of the city authorities the florists and plantmen must co-operate with capital—always with a big C—and hey, presto! the thing is done. But, alas, and alack! the florists will think of a former co-operation with capital, when capital promised to provide a stately horticultural hall in which the New York Horticultural Society was to find its home, while the commodious basements were to be at once a flower market and a source of income to the New York Horticultural Society. Think what a horticultural hall should be, then visit the melancholy edifice on West Twenty-eighth street bearing that name—dark, ill-ventilated, ill-warmed—which failed as church or lecture-room, or concert-hall, because of its abominable acoustic qualities, making it impossible to hear anything properly, though an attempt has been made to rectify this by hanging and festooning strips of bunting across the ceiling, painfully suggestive of the week's wash hung out to dry. It is impossible to show anything properly in this place, and it has not even the merit of prettiness. After looking at the expense, inutility and ugliness of the whole affair, purchased and managed by capital on business principles,

we scarce can wonder that the florists view any fresh co-operation with that power rather suspiciously.

Of course, a most important question with the florist must be that of heating, and here comes the oft-agitated question of steam versus hot water. It is impossible that the trade will ever fully settle the merits of the two, though the steam party tried to carry the war into Africa at Cincinnati during the late convention of the Society of American Florists. It is generally conceded that steam is the more expensive mode of the two, though the Pittsburgh florists differ from their New York brethren on this point. However, after giving this impression at the convention aforesaid, one Pittsburgh delegate confessed that he only paid *seventy-five cents* a ton for his coal, while another Pittsburgh man acknowledged that he possessed a private coal mine of his own, whereat a quiver of anguish ran through the souls of the New York florists. The greater cheapness of fuel would make Pittsburgh a formidable rival in rose-growing, only, by a merciful dispensation, the growers of that place have never yet succeeded in raising such perfect flowers as are produced nearer New York. A growing evil—no pun is intended—is the gentleman florist, who, beginning as an amateur grower, either from love of plants or because it is the correct thing—"it's English, you know,"—finds he can sell his flowers, and so drifts gradually into business. Of course, men of small capital cannot for a moment compete with such growers, who can spend freely to obtain the best results, without feeling the trade depression of a bad season. Many a wealthy man who passes for a lover and encourager of horticulture, is, in reality, as much a professional florist as the workingman whose bread and butter depends on the contents of his greenhouses. Such men are a sore trial to regular florists, as they offer such an unfair competition; but English growers have to cope with a similar evil in these days of depreciated rents. An English paper recently contained a protest from the florists of a Midland town, where the local proprietor, a duke, was driving them from the field by excessive competition, even going so far as to keep boys selling the ducal flowers in bunches on the streets.

The flower trade may be looked upon by stern moralists as a luxury and superfluity, but the fact remains that it is a most important business, with an increasing influence on the minds of our people. If funeral flowers have lost their prestige, the taste has branched out in a dozen other directions. Relative to the above-mentioned branch of the business, is it not the public who caused the custom of funeral flowers to fall into disuse, through vulgarity of ostentation? The writer recollects a lovely design made by a Western florist, an *Agnus Dei* in snowy flowers, with the words "Rest and Peace" below. To adorn the coffin of some beloved and lovely maiden, perhaps? No, it was a tribute of respect from the friends of an eminent "tough," who, like the lamented Mr. Bardell, was knocked on the head with a beer-glass in a saloon fight!

When birth or death or marriage, a society debut or a departure to other lands, must be marked and commemorated by the florist's art, who shall deny these busy workers more recognition in the industries of our country?

E. L. TAPLIN.

CANNAS.

FOR decorative plants, either upon the lawn, for the border, or for large tubs or vases, there is no class of plants better adapted than cannas, and it is safe to say there is not a class so little appreciated. In the canna we have decorative elegance combined with cheapness and simplicity of culture, a combination of the greatest importance, both to those who wish to plant on a large scale and to those who have but little room, and with limited means to gratify their tastes. The canna is one of those plants that is ornamental in whatever situation it may be placed; of it there are a large number of varieties, which vary so much in the size, shape, color and deportment of the flowers and leaves, and also in height, that few other plants can compare with them in usefulness or beauty in the flower-garden. Single specimens, planted on the lawn, where the garden is small, or planted in large masses, so arranged that each variety can be seen without detracting from the others, produce a grand effect. A bed, say fifteen feet in diameter, with *Robusta*, a variety with dark bronze foliage growing in good soil twelve feet in height, for the centre, occupying three feet; a row three feet distant of *Musafolia*, with its immense bright green leaves and crimson flowers; then a row equally distant of *Pro-meus de Nice*, one of the most free-flowering of all the cannas, its rich canary-yellow flowers contrasting so beautifully with the crimson of its companions as to make a perfect picture. For an outer row use *C. iridiflora*

(see illustration), the best variety of which is *Ehemanni*, a plant of recent introduction, and one worthy of all the praises that have been given it. This completes a bed of real tropical appearance, and there should be no tall-growing plants near to mar or detract from its beauty; then there is nothing in ornamental gardening that can compete with it as an object of true grandeur and beauty.

A remarkable feature of the canna is that its wants and requirements are of the most simple character. It delights in a deep, rich soil, and should have rather a moist situation. But if the ground is dug very deep, so as to enable the roots to go down beyond the reach of our summer droughts, almost any situation will suit them. In dry weather it will repay moderate cost to water liberally, and if liquid manure can be substituted for clear water occasionally, the growth will be more vigorous and the leaves attain greater dimensions. Where watering is not practical, cover the beds with newly-cut grass, which makes an excellent as well as a slightly mulching.

After the frost has destroyed the beauty of their foliage, the roots should be taken up and stored in a dry, warm room. We cut the tops close to the ground before taking up, and leave on whatever soil may be attached to the plants. As we have previously said the roots may be left in the ground during winter, provided the bed is mulched sufficiently to protect them against frost.

BEGONIAS.

AMONG introductions of the past few years there are some worthy of special notice, and should be more prominently brought before the public than they are, so that lovers of ornamental foliage plants may not overlook them. There is always a diversity of opinion regarding the desirability of plants; what pleases one person may not please another, but those that I shall mention will, I am sure, give general satisfaction.

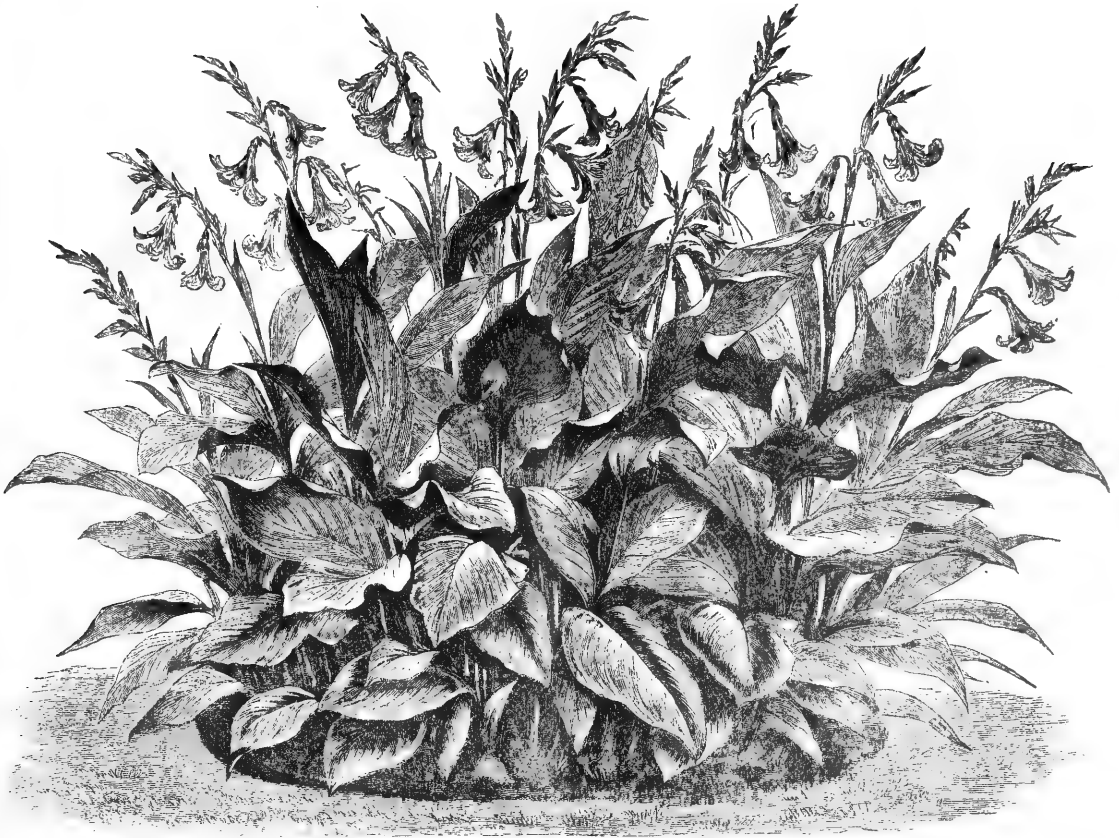
Begonia Manicata Aurea forms a distinct variety, in the markings of its leaves, from any other I have seen, being blotched and spotted in a most irregular manner, resembling somewhat *Farfugium grande*, with a creamy yellow on a light green ground, which forms a distinct feature in this class of plants. Of its flowering qualities I am unable to speak, as mine has not come to that period yet, but if it does anything like its parent, it will still add to its importance. But its foliage alone makes it an object most worthy.

Begonia Ville de Namur resembles in style *Louise Chretien*, but far more distinct and beautiful in its markings. It has a clear, glistening appearance, seldom seen in any leaf, that brings out the shades most beautifully, and makes it very effective. Besides this it has a hardy constitution, and seems to grow freely under common cir-

cumstances. No one should be without these two plants. I often experience much difficulty in getting plants thus recommended, and my search has frequently proved a failure. It may not be in accord with the principles of horticultural works to give the names of parties from whom certain plants can be procured, but it would confer a great favor to their readers, and for this purpose alone I state that these two begonias were obtained from John Saul, Washington, D. C. W. P. Simmons & Co., Geneva, Ohio, furnished me with very good varieties, some of which, by the diversity of their markings, are well worthy of notice.

Rei Fernando Major is somewhat in the same style as *Louise Chretien*, though more distinct and varied; but the difference is not great—only it seems a stronger grower. *Andalousie* makes an extremely fine contrast as the leaves are large and of heavy texture, centre of the leaf veined dark green, surrounded by a band of beautiful silvery-white, suffused with light green. The outer edge is a bronze purple, contrasting finely with the inner color. This is a very fine variety.

Acti is again a contrast to many others, in having the foliage of a very dark green spotted all over with white in an unusual manner, the white and dark giving out a very

IRIS-FLOWERED INDIAN SHOT (*Canna iridiflora*).

fine effect. There are also several others, such as *Mme. I. Menoreau*, *Voie Lacti*, *Michael Anger*, &c., that will always add variety to collections, but the former are the most distinctive in the features which I have enumerated.

I wish to add a few hints from the pen of a lady who devotes much time to the culture and propagation of begonias. She says: "There are millions of them that have never been developed. We used to think they must have just the proper conditions of heat and moisture, and must be watered without a drop touching the leaves, whereas there is no class of plants that will more readily adapt themselves to our wants.

"Florists' catalogues tell us they are deservedly popular as pot-plants, but are suitable for certain positions only, where heat and moisture can be supplied. It is strange that they should reiterate from year to year this same thing, and I fear most of them are too busy to form an intimate acquaintance with them.

"I have experimented with all classes of begonias within my reach; have bedded them out and kept them in pots, and find that they require no more attention than the common run of plants. I have also supplied my friends liberally with them, so that the nature of them should be better understood and their popularity increased. One friend of mine has a large rockery that I have filled from year to year with begonias, the growth of which has surprised and been the admiration of all who saw them.

"The position of this rockery is partially shaded and

contained begonias in many varieties. Last year there were between seventy-five and one hundred plants put in it. The arrangement of the rocks was such that they were not crowded, and I have never seen finer specimens of the Rex varieties, *Louise Chretien* included.

"Another charming spot was made in partial shade by putting out our native ferns, and when warm weather was certainly established filled in with begonias of the different shades. I have found *B. Nigricans* especially adapted for this kind of planting, its dark-colored leaves contrast admirably with the delicate green of the ferns." With many other useful hints, she goes on to say: "My specialty is the begonia, and my interest in it is being increased daily from my observation of the germination of seeds and the care of the little seedlings. It is wonderful how much pleasure can be derived from an intimate acquaintance with any class of plants."

These are a few hints thrown out by this lady, and I am sure they will be appreciated by those who love flowers. I think it is a pity that so few of the persons who take an interest in this kind of work can be induced to give the benefits of their experience to the public. This is only a gleanings from her letter, but I thought it too good and useful to be concealed, and I hope the lady, who is a subscriber to your monthly, will excuse my inability to suppress such good matter, for her eye is sure to recognize it.

N. ROBERTSON,
Government Grounds, Canada.

GRANDMOTHER'S GARDEN.

I'VE been back to grandmother's garden,
Where the dear old flowers grow
That she planted there and tended
In the summers long ago—
The sweet, old-fashioned flowers
That used to delight her so.

There are lilacs by gate and doorway,
And lilies, all in a row,
Whose blossoms we fancied trumpets
For fairy bands to blow;
And southern-wood, spicily fragrant,
By the door-stone, worn and low.

Pinks that are rich with odors
Of clove and myrrh are there,
And I seem, when I smell their fragrance,
To be in the house of prayer
In grandmother's pew, on Sunday,
Close by the pulpit stair.

I can see her there with her hymn-book
Open at "Wells" or "Mear,"
With a bunch of her garden "posies"
Between the leaves, and hear
The voice that has sung in heaven
For many and many a year.

Grandmother gave her flowers
To crown the maiden's head
When she stood at the marriage altar
And a wife's "I will" was said;
And they came to her for blossoms
To shut in the hands of the dead.

I remember the summer morning
When grandmother heard the call,
Of the angel of death whose summons
Will some day come to us all;
The June's first roses were blowing
Down by the garden wall.

"How sweet they are," she whispered,
"What dear things God has made:
I am going to dwell in His country,
Where the roses never fade."
Then she folded her hands on her bosom
And it seemed as if she prayed.

She looked so peaceful and happy
With her hands clasped on her breast,
Holding the flowers we brought her
That we fancied her taking a rest;
'Twas the rest that's forever and ever,
Of all, the sweetest, best.

Over her grave in the churchyard
Her dear old flowers grow;
But I think of her out in the garden
Of God, where His lilies grow;
And I fancy she tends His flowers
As she used to here below.

EBEN E. REXFORD.

THE WHITE DAFFODIL.

CHAPTER I.

THE Abbey of St. Offa was one of the earliest, and, at the time when Cedric was Father Abbot, it was by far the largest religious house of its order in all the South country, and second only in size and importance to the great cathedrals, the one at Canterbury and that other which Paulinus had built at York, and from which Christianity had spread among the Anglo-Saxons. On all sides it was surrounded by rolling downs and great oak woods, except that from the southeastern front wide avenues of giant yew-trees carried the eye straight down to the blue sea. The place was richly endowed with broad acres of oaks; the pious also made it rich with offerings, and Cedric the Abbot was shrewd and careful amid troublous times; and so all was well with the great religious house over which he had been called to preside.

It was a great stronghold, as most such places then

were, and had a moat around its outer walls, so that when once the ponderous drawbridge was hauled up and the great oaken gates closed, nothing less formidable than a regular siege could give its inmates much cause for alarm. It was a huge mass of solid masonry; monks, past and present, had laid every stone there, a labyrinth of corridors and passages, some even underground, while others wound mysteriously through its great thick walls to cells, closets, isolated dormitories, or up the strong towers, whence the whole country-side might be seen. Truly a mysterious and wonderful place, even as its ruins now testify. The Abbot's private apartments were in the tower on the south side of the buildings, overlooking the garden, which, being sheltered and sunny, afforded, in fine weather, a pleasant place for study and meditation, and in such, as we all know, burly abbots were ever wont

to delight. The benighted strangers who now and then passed the place thought that it was brilliant with light, and could have sworn to the sound of merry minstrelsy within the old gray walls; but then we know it was not so. Cedric, the Father Abbot, was too ascetic—too devout a man to allow of such gross levity under the roof of the Abbey of St. Offa. No, the brilliance was that of the moonbeams seen through the trees, or of the will-o'-the-wisp as it danced and fitfully wandered over the dark, black waters in the moat. The music was the sighing of the winds through the naked branches, the shriek of the owls which roosted in the old tower, or the howling of the wolves and the foxes in the old oak woods. "Minstrelsy forsooth!" said the monks in awe, "nay, our Cedric is indeed too severe an abbot—he loveth humiliations and penances rather than merry-making—he is very severe, is this our good Cedric."

Two children were at play in the old abbey—it was not a proper place for children, perhaps—but they were there, and whatever might be severe and gloomy about the place, they were bright and happy. The boy Eric was dark and had a tinge of thoughtfulness in his handsome face even thus early, and she, the girl Adela, was a fair-haired, blue-eyed little Saxon—"a very phantom of delight," thoughtful also betimes, but merry and active as a kitten, and with a voice sweet and flexible as that of a little song-bird.

It was a showery day late in summer and the old sacristan had allowed the children to play in the chapel, and they had frolicked about to their heart's content, playing at hide-and-seek and other games which children have played over and over again ever since the world itself was young. "Oh, Eric, Eric! come, come! here is a lovely thing." The little witch had at last actually invaded the grand stall of the Abbot himself, and the "lovely thing" was an illumined missal—a work of art in its way—with thick vellum leaves and rich gilt binding and clasps of pure gold; but what had attracted the child's attention most was the pretty pictures it contained, flowers and leaves, erstwhile, then the most graceful of intertwined ornament, and reptiles, birds and fishes, all the cunning work of some old monk-artist who had put his lesiure and his soul into his work and had so made it a mysterious "thing of beauty," forever a joy to all men. And the boy came and sat beside her.

"But perhaps we are wrong," he said, "'tis the Abbot's psalter, and he—"

"Oh, don't mind, Eric! is not this a pleasure? See, see! What lovely flowers—this white daffodil, is it not beautiful?"

And the boy thought so too, and he remembered the daffodils that grew in the old orchard and by the sundial in the abbey garden and in the meadows near the fish-pools, for he had been to fish there with old Berta, the cook, in the time of Lent, when the abbey meadows were golden with their blossoms, and Berta had told him that they were the wild lilies of Lententide; but this in the sacred book, this snow-white flower, this swan-like beauty in the psalter, how lovely it was! and he—he had never seen the like of it before. After Adela he thought this book the most beautiful thing he had ever seen.

They looked at the forbidden book in rapt delight, for books, least of all books with pictured pages, were then far too rare for even grown-up men of learning, and children rarely saw them, or could touch even if they saw. It was like a moment in Paradise to them. But the sun shone in on them through the rich tracery of the windows, for it was fair without, and they put back the sacred tome in the stall and ran out to play in the garden, for they both felt a little afraid lest they should, after all their delight, be chidden, if not punished. So they ran down the sunny garden and talked of the flowers and chased a butterfly or two, and pelted each other with red cabbage roses, and looked longingly at the ripe figs that hung, purple and luscious, in the sun on the old walls.

"When you are a great, big man, Eric, you will go and fight and kill ever so many people, and then you will marry me, will you not?" Thus she chatted and pleaded. "And we shall live in a castle and have lots of horses and dogs and hawks for hunting, and we shall be so happy, we two; and we shall have a garden, a sunny garden like this of the Abbot's, with all sorts of lovely things in it, like those we saw to-day in the Abbot's psalter, and that white daffodil, I must have that. You will fetch it from where it grows, will you not, Eric?" All of which Eric, like the brave little fellow he was, promised to do quite readily, not only in words to the girl, but, child as he was, he made a deeper promise to his own heart also; indeed, we all do that, however old we may be, when we really mean to keep our promises. And Eric was going to say that he would ever do all she wished, but just then the burly old Abbot himself came out of an arbor there quite near to them. "Oh, oh!" quoth he, "and so you have dared to touch my psalter, Eric; and you, Adela, you little sly puss, you, too, have been in mischief in the chapel, I hear!" Adela screamed and would have run away, only he was so near to them and took her so much by surprise. "I did look at your book," said Eric. "I know it was wrong and wicked, but I did not harm it, indeed I did not!" "So, so!" said the Abbot, "you must be punished, Eric; you want to pry into books. So, so! then Gilbert shall teach you to read them; you must write, too, Eric," and the old man laughed again as he said: "Ah, Eric, you will wish you had never touched a book long before Gilbert has done with you. Many a big man has repented of having meddled with books, Eric." He had been watching the children at their play and had heard all their prattle from the leafy screen which had hidden him from them. And now he reached them down a few ripe figs from the wall and patted them both, and Adela dried up her tears and smiled up into the gray eyes of the Abbot, not forgetting to eat her figs also. The old man had not been angry, but they could scarcely believe it, for they had made up their minds as to the enormity of their sin, and even after he had kissed them and had left them at their play and had sent Berta to them in the arbor with milk and sweetmeats, they could scarcely believe in their good fortune, so much had they been in awe of the old man's displeasure. But he kept his word and told Gilbert, the scribbler, to sow the seeds of learning in the boy's mind. Eric was diligent and Gilbert a kind and

able teacher, and the boy was glad to learn to read and write, which in those days so few could ever hope to do, so much more difficult was it to get means and opportunity.

Then, when his uncle, who was a Norman lord, came to the neighboring castle, he, too, taught the boy the use of arms and all the lore of chivalry, and they rode out together hawking, or they chased the red deer over the rolling downs or through the gnarled old oaks in the neighboring woods, where their serfs kept the great herds of black swine. What wild sport it was, that of chasing and hawking with their dogs and dependents, men also, and yet slaves who belonged to the lord as surely as the castle and the trees themselves. The lord himself, surnamed the "Black Hawk," did not waste much love on his nephew, and was, indeed, very stern with him betimes. Eric was his brother's son, and he and his brother had ever had bitter feuds. Both had loved the same fair Saxon and she had refused his suit and had wedded with Eric's father. Then, soon after the birth of her boy, she had died, and the lad had been reared by a Saxon peasant woman, the porter's wife at the castle gate. On the death of his wife, the "White Knight," as Eric's father had been called, went to the first crusades, and he had died fighting in the Holy Land, so that the care of his son had legally devolved on his younger brother. Adela was the Black Hawk's only child; the fair Saxon wife whom he had chosen for her beauty had been frail as well as fair, and her Norman husband, in his jealousy, had slain her with one blow, and even now the country people tell the story and believe that a fair woman's ghost appears in that fatal chamber which had been hers in the old ivy tower, and at night when owls shriek, the villagers who are benighted say it is the wild death-cry of that false wife with the blue eyes and wondrous hair of gold. But Ulrica, the porter's wife, who was Eric's foster-mother, had been maid to this unfortunate Saxon beauty, and knew more than most, of the truth. She always said, "Black Hawk is a devil and not a man; no woman's love ever came to him, and that proves that he is a devil."

And so the two children grew up together from childhood to youth to love each other, and Adela's father pretended that he was not loth that it should be so, for was not the lad heir to the big old castle and the broad acres which had belonged to his father, the White Knight? So he told everyone, but in his inmost heart he hated the handsome lad; besides, his friend, Ealdar, the Anglo-Saxon, who lived in a neighboring castle, had seen that Adela was fair, and although he was now old, yet would he fain marry the Black Hawk's daughter. Ealdar was rich in lands. Swine in plenty ranged through his broad acres of sturdy oaks and his hinds were many. "He could not live long," so the Black Knight thought, "and if I can get this proud young Eric out of the way, I may not do so badly after all." Poor Adela; she was so merry, so happy, and knew nothing of the black mischief which was hatching. Even now, when Eric and she were so fond of each other and their first dreams of love so fresh, so innocent to them, troubles were brewing which were to part them.

CHAPTER II.

THE Abbot sat in his own room in that little tower which overlooked the old abbey garden. This was his favorite cave or den, as he playfully called it—for he likened himself to an old bear—from which he could see the flowers in the sunny place below and over the tree-tops straight out to the blue ocean; and to-day he was anxiously watching the distant horizon for a sail—he was longing that a wine-ship from Spain, long overdue, should anchor in the little bay below. It was not that the abbey cellars were likely to run dry, and so be unable to fulfil their duty; there was wine, good wine, there in plenty, and this ship was bringing more, since good wine is ever welcome in old abbeys as elsewhere, but the Abbot expected news also, hence the eagerness with which his keen gray eyes swept the sea below. He was a wise, shrewd man, this old abbot, and he well knew of all the Black Hawk's craft and subtleties. "Poor children!"—even he so called them although they were children no longer—"they are no match for his vile intrigues. So, so! and he would wed that dove with the blue eyes to Ealdar. Ah! let me see, how does the matter run?" and the old man put the tips of his fingers together as he leaned backward and looked up toward the ceiling and thought out the plot. "Ah! So, so! and the boy Eric, he must be cleared out of the way. So, so! Not badly planned; faith, not so badly, but perchance it may not be. The craftiest fox is not always sure of geese for his supper! So, so! he may fail; he may fail!"

But the Abbot was ill at ease. Months ago he had had a letter from his brother, who then lay grievously ill in his monastery at Seville; news traveled slowly and erratically in those days. For aught he knew he might now be dead. Cedric himself was old, too feeble to make so long a journey, and yet it was important that some trusty one should go to Spain. Some of their rarest manuscripts, priceless indeed, were in his brother's monastery, whither they had been sent to be copied by a wondrous Andalusian monk—an artist—the same who had made that beautiful psalter which the children had seen in the old chapel, now years ago.

Of all Cedric's monks there were but two whom he could have trusted with so important a mission. Elfric the Saxon he loved and trusted as a brother. But then Elfric really was the chief steward and almoner of the great house, and managed all expenditure and the receipt of endowment money, and so he could ill be spared. Then Gilbert—how could they spare Gilbert? He who wrote their chronicles and kept all the books and deeds of the great estates. He was both librarian and notary, most cautious and skillful; in many ways his aid and counsel were most valuable. No, Gilbert might not be spared to go. And so the good Father Abbot had been sore pressed, as all men, good as well as bad, must ever be betimes. But one morning as the good Father stood at his window looking out seawards, a beautiful blackbird with a golden bill perched itself on a hawthorn bush and began its melody. Cedric had seen many blackbirds, but in some way this glossy creature of black and gold seemed to him different and its notes richer and more musical, and it sang there on the top branch of the thorn-tree, and the

old man wondered that so much melody could come from such a little thing. Being a wise man he wondered at the miracle of the bird's song. But the bird was an angel who had brought a thought to him. Even then as he listened the thought flashed upon him that he would send Eric to Spain, for had not the Black Hawk often said that he ought to travel? "Ah! and a gloomy road he would make him take, too," thought the Abbot, "if he dared; if he dared! Ha, ha! laughed the old man, "if he dared!" For Eric was now a boy no longer; he was on the verge of manhood, and as tough and straight as a young ash-tree, and those who strove with him at the sports on holidays said he had pith in him and a grip like that of a young giant. "Ah," said old Ulrica, when they told her how that he had twisted the neck of the great red stag which ran on him unawares and had gored him, "Ah," she said, "he has all the old Saxon pluck in his lithe Norman body. Why, man, the blood of the truest knight and of the fairest and best lady that ever lived is in that boy."

His uncle, the Black Hawk, made but little objection, and that for form's sake, and so Eric went back in the wine-ship, carrying rich presents, also an old manuscript or two, some rare silver-work and a pair of beautiful wrought-iron gates for the place of sanctuary in the old Spanish monastery. These gates of beaten-work had been made by Ulric of the Forge, Eric's foster-brother, and are even still considered priceless from an artistic point of view, for are they not models for all artists in hammered ironwork even unto this day. Poor Adela! It was like tearing her heart up by its roots, this parting, but she believed the Abbot, who told her it was better so; and old Ulrica had told her that ladies should always encourage their lords to be brave and venturesome, and not cry like children, and so make homesick cowards of them; and her own father, dissembling as was his wont, was unusually kind, and had said that Eric would, of course, soon return, and spoke of the merrymakings there would be when he came of age; and so she smiled and did her best at the parting. She was a child no longer; the parting made a woman of her. The tears will come, Eric, she had said, but I am Saxon, I think, and not a coward. I want you to go for dear Cedric's sake, and he has promised to guard me for you—for you, Eric!

and he will offer prayers that no harm may come. And so they had kissed each other and Eric went down to the ship and she went up to her own rooms in the ivy tower, which was under the shelter of the great keep.

There was only one heart glad that day in the whole forest country, for nothing could have pleased the Black Hawk better than Eric's going away, unless, indeed, it had so chanced that the boy had died. "What a pity that the red stag did not kill him," he thought. "Yes, that would have been even better than his going away." But he was glad; he would be able to manage matters much better, he thought, now that Eric had gone into Spain. So he invited his friends and they held high revels, with much feasting and minstrelsy in the old hall, and the ash-logs roared on the hearth and the boar's head smoked on the board and wassail was brewed, and Ealdar came, also, to the merrymaking; and old Ulrica, who heard the gossip from the serving-men, cursed the Black Hawk worse than before. "Behold!" she said, as her eyes flashed fire and her bare arms were upheld and their palms spread out toward heaven, "behold! shall not he be accursed who bringeth the wolf to the place wherein a motherless lamb sleeps?" They were not easily affrighted, these sturdy serving-men, but they shuddered now as they heard the old woman's curses.

And Adela, no one knew how she missed Eric—his face, the sound of his voice; how far away and dream-like their love seemed to be as the days and weeks flew by, like ill-omened birds of passage—so silently and yet so swiftly. True she had his pledge—a ring of purest gold that Ulric had made from an old coin which the Abbot gave. She had a deeper troth than all in her warm young heart, and then had she not his favorite hound, Hela, always by her? And there was sympathy in that thought, for had not she—the hound—also missed him? For Eric had made such a pet of Hela always; had fed her, indeed, with his own hands when her first stupid little puppies came, and he had a big basket placed in his own dormitory for the lithe and gentle creature with the mild brown eyes, because she would not have them elsewhere and had pleaded so eloquently with him in her own mute way. All of which Adela knew, and so she and Hela were friends indeed.

(TO BE CONTINUED.)

FLOWERS IN PERFUMERY.

THE manufacture of perfume from flowers has been carried on more or less since the beginning of the historic era. The ancient Egyptians seem to have understood the process of distilling attars from various flowers and fruits. During the middle ages we read of a perfume known as Hungary water, which was first distilled from rosemary in 1370 by Elizabeth, Queen of Hungary, who obtained the recipe from a hermit, and by the use of it is said to have preserved her beauty to old age. Catherine de Medicis, when she came to France to

marry Henry II., brought with her a famous Florentine perfumer, who had the art of manufacturing oils from flowers, both by the processes of inflowering and by maceration, though, of course, his methods were rude and unscientific as compared with those of to-day. From that time the French have paid great attention to the cultivation of flowers for this purpose.

In an elaborate paper upon perfumery, furnished by Mr. Eugene Rimmel to the Society of Arts, London, and published in No. 391 of its journal, scents in gen-

eral use are classified in eighteen groups, and the vegetable products used in this art are arranged in ten divisions, as follows: First: The floral series; namely, jasmine, rose, orange-flower, cassia, tuberose, violet, jonquil and narcissus; the attar, or otto, of roses is the most valuable product of this division. Second. The herbal series, comprising all aromatic plants, such as lavender, spike, peppermint, rosemary, thyme, marjoram, geranium, patchouli and winter-green, which yield essential oils by distillation. Third. The *andropogon* series, which furnish the lemon-grass, citronella and ginger-grass oil. Fourth. The citrine series, comprising the bergamot, orange, lemon, citron and lime, from whose rinds an essential oil is obtained by expression or distillation. Fifth. The spice series, including cinnamon, cinnamon leaf, cloves, mace, nutmeg and pimento. Sixth. The wood series, consisting of sandal-wood, rose-wood, rhodium, cedar and sassafras. Seventh. The root series, comprising orris-root and vetiver, called by the Hindoos kus-kus. Eighth. The seed series, composed of anise-seed, dill and caraway. Ninth. The balm and gum series, including balsam of Peru, balsam of Tolu, camphor, myrrh, benzoin, storax and other gums. Tenth. The fruit series, including bitter almonds, Tonquin beans and vanilla.

The artificial preparations and the animal perfumes make two more series. The greatest number of the materials, amounting to twenty-eight, is obtained from the South of France and Italy, which is the chief centre of manufacture for perfumery materials. The East Indies and China furnish about twenty-one, Turkey, two, Africa, two, North America, six, South America, six and England, four. The only articles named from the United States are peppermint, sassafras, and winter-green.

The chief places for the growth of the sweet perfume-producing flowers are Montpellier, Grasse, Nîmes, Savoy, Cannes and Nice, in France. It is there that the jasmine, tuberose, cassia, rose and violet grow to such perfection, and that the processes of enfleurage and maceration are commercially worked. Nice and Cannes are the paradise of violets, producing annually something like one hundred and fifty tons of blossoms. The variety cultivated is generally the double or Parma violet, which is so productive that the flowers are sold at about fivepence per pound, and we all know what sort of bouquet a pound of violets would make.

Nîmes is famous for its thyme, rosemary, aspic and lavender; at Cannes the acacia thrives particularly well, and produces yearly about ten tons of flowers. One great perfumery distillery at Cannes uses annually about one hundred and fifty thousand pounds of orange blossoms, twenty thousand pounds of acacia flowers, two hundred thousand pounds of rose leaves, forty thousand pounds of jasmine blossoms, thirty thousand pounds of tuberose, together with a great many other sweet herbs. Nice produces an annual harvest of two hundred thousand pounds of orange blossoms. Five hundred pounds of orange blossoms yield about two pounds of pure Neroli oil. The extraction of ethereal oils, the small quantities of which are mixed in the flowers with such large quantities of

other vegetable juices that it requires about six hundred pounds of rose-leaves to produce one ounce of otto of roses, demands a very careful treatment.

The abundance in Sicily of every flower which in our climate is most highly prized, recalls the traveler in the story who arrived in a country where the children played at pitch and toss and marbles with diamonds, rubies, emeralds and other precious gems. "These are, doubtless, the sons of some powerful king," he said, and bowed respectfully before them. The children, laughing, made him soon perceive that they were the street boys, and that the gems were only the pebbles of that country. In Sicily the crimson grenade and rose trees, the peach-colored rhododendrons, and the delicate white camellias form the country hedges. The white and green myrtles, and pink, white and flame-shaped and flame-colored tulips grow wild. When a pleasure garden is made, the orange and lemon trees are taken out, because they are too common. Alphonse Karr was much surprised to notice that the ladies of Nice never decorated themselves with real flowers, but seemed to dislike them. He thought this all the more strange in a country where it is no longer a mythological flattery to say that flowers spring from the footprints. The roses, violets, jasmine and mignonette are cultivated by the peasants only for perfumery purposes, and honored but as we honor potatoes or cabbages.

We are now wholly dependent for our finest perfumes on France, so that when a flower crop fails, as the jasmine and rose sometimes do, the manufacturers are put to serious inconvenience. It is, therefore, the interest of perfumers to promote the production of these flowers in other countries, and the high price they fetch in the market would make it a very profitable speculation. Great praise is due to the pioneers of flower-farming in the British colonies of South Africa and Australia, and especially to Col. Talbot in Jamaica, whose efforts in this direction bid fair to meet with complete success. The cultivation of flowers on a large scale for perfumery purposes in this country would perhaps be impracticable. For American flowers, however beautiful in form or color, do not possess the intensity of odor required for extraction; and the greater part of those used in the South of France for perfumery purposes would grow here only in hothouses. The one flower which might be had in abundance would be the rose; but the smell of it is very faint compared with that of the Southern rose. The shortness of the flowering season and the high price of labor as compared with those in Europe would be serious disadvantages with which to contend.

Still I know of no reason why we should not grow flowers for their odors as well as for their colors. There are scores of flowers in our gardens that would yield admirable extracts with a little pains. For instance, there is the heliotrope, the rose, lily-of-the-valley, honeysuckle, myrtle, clove pink, and wallflower. We have extracts from all these flowers in the perfumers' shops, but they are nothing but skillful combinations of other scents. Every lady, if she wishes, can be her own perfumer; and it affords a delightful recreation even if one does not care to earn a little pin-money by it. Some of THE CABINET

readers may like to try the experiment for themselves; and we therefore give them the benefit of a recipe which we found very good:

At the season when the flowers are in bloom, obtain one pound of fine lard; melt it and strain through a close hair-sieve, letting it drop through into cold spring water. This operation granulates and washes the blood and membrane from it. In order to start with a perfectly inodorous oil, the process may be repeated three or four times, using a pinch of salt and a pinch of alum in each water. Finally wash it several times in clean water; re-melt it and put the clarified fat into a glue-pot and place it into such a position near the fire of the greenhouse or

elsewhere that will keep it warm enough to be liquid; into the fat throw as many flowers as you can, and there let them remain twenty-four hours; at this time strain the fat from the spent flowers and add fresh ones; repeat this operation for a week. We expect at the last straining the fat will have become very highly perfumed, and, when cold, may be justly termed *pomade à la héliotrope*. To turn this pomade into an extract fit for the handkerchief, all that has to be done is to cut the perfumed fat into small pieces, drop it into a wide-mouthed bottle and cover it with highly-rectified spirits, in which it must remain for a week. When strained off the process will be completed. CLINTON MONTAGUE.

THE DOCTOR'S PRESCRIPTION.

“**N**OTHING but a garden will do it. The pills and powders this medicine-case holds are no such panaceas for bringing the roses to your cheeks or strength and activity to your system.”

It was this Dr. Stanley said to Alicia Hunter, pale and languid on the sofa in a furnace-heated room, as the first heralds of spring appeared to the snow-capped hills and ice-bound streams.

“Nothing in the whole *materia medica* but a garden taken by you in the right way will do it. Cheer up, Miss Hunter, you are booked for years to come, if you accept the new lease of life this medicine will give. Only it depends on you to wake an interest and make the effort. You may think of this last prescription, and if you need help send for me.”

Alicia, who had been housed since November with neuralgia and a train of nervous disorders fast settling to permanent disease, *did* think, the result of which was that early one spring morning, while the robins were yet chirping about their breakfast, a ghost-like looking maiden, bundled with numerous shawls and hood, slowly and feebly stepped about the front-yard, leaning upon her father's arm. It was, however, the initial step, and events followed. Every pleasant day after, Alicia was seen there, but a short time at first, watching the spading and mellowing process; but as the days grew warmer, little by little she began work, until she surprised herself one day to find how much in the way of seed-planting and general hoeing and digging she could actually accomplish, and that the doctor's last prescription was sending the blood in such swift currents through her veins.

And the garden grew and bloomed. How pretty it was! And the time and enthusiasm Alicia exhausted upon it! She looked up the name of every shrub and flower, its nature, home and habits. She made herself acquainted with the kinds best suited to such soil as hers and the best way of treating them, and by midsummer, with the work outside and the enthusiasm within, she had forgotten many an ache and pain.

But summer cannot last forever—would it might, was often her thought—and as the cold, chilly days of autumn drew on she could not bear to lose her garden, even for the winter; hence, one of the windows in her father's sitting-room was dedicated to this purpose. It was the same room in which she had passed so many hours of pain the winter before, “But now, thanks to good Dr. Stanley's prescription,” she would often say, “my life is something different.” For nature is ever kind to her children, ready to whisper her secrets to them and help and heal in ways manifold. Alicia touched the spring and the elixir of life gushed forth. Whatever of plants could be potted and moved to the window-garden were placed there, and also the pots containing the geranium slips she had started. She watered and cared for these plants as few are tended, and it is certain that they brightened the sombre room greatly, but the pleasure and brightness of Alicia's face at their progress was even greater. The little pot of heliotrope and box of friendly pansies were perhaps her favorites, but she loved them all. She had also subscribed for a magazine of floriculture—I will not say what one—and eagerly looked for its coming.

“Next year,” she often said, “I mean to have twice as many flowers as this. I'm learning all the time.”

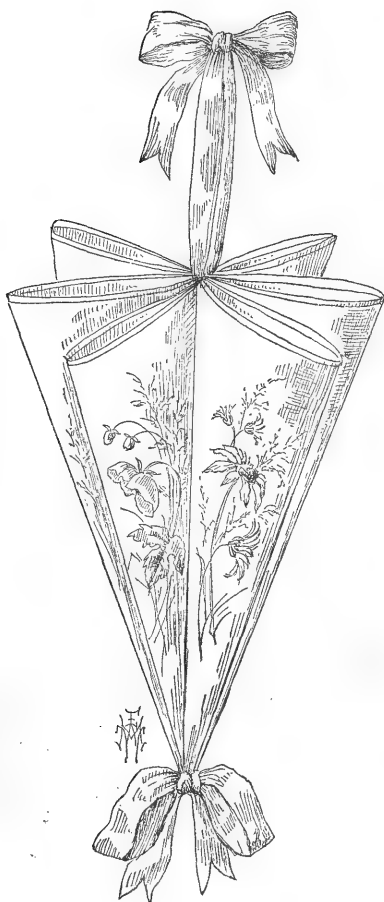
Winter drew on apace. The earth was wrapped in ice and snow, and sleigh-bells jingled everywhere. The days sped on till Christmastide, and on Christmas morning, when the merry chimes rang through the frosty air, Alicia Hunter rang the bell at Dr. Stanley's. He opened the door upon a young woman in the bloom of health, with a glow upon her countenance, not all the result of the crisp winter morning, for in her hand she held a bouquet—a fine, large one—just taken from her window, and she assured him, as she handed it, that it was the result of his prescription “put up;” but he, with an eye to science, informed her that her present self was the success of its practical workings.

L. E. ELDRIDGE.

HE deserves disappointment who gives with the hope of return. The object of conferring a benefit should

be the good of the receiver, without regard to any collateral advantage to ourselves.—*Seneca*.

HOME DECORATIONS.



SHOE-BAG.

Umbrella Shoe-Bag.

THE shape of the bag is as follows: Cut a circle thirty inches in diameter; double it to make six sections, leaving each one open at the top, and stitch strongly the division between each, so that all form a point at the bottom; thus the bag is shaped like an umbrella partially opened.

The material necessary for it will be one yard of gray silesia, one yard of cardinal, a piece of cardinal worsted braid, one spool of sewing-silk to match, also three yards of cardinal satin ribbon an inch and a half wide. Cut two circles, each thirty inches in diameter, one of the red silesia, and one of the gray, using the gray for the outside of the bag. Place the pieces together, and bind the edges with the red braid. Stitch the sections together with red silk.

In the middle of the top, where the sections are joined, place a long loop of the ribbon with a bow and ends. Also a bow of the same ribbon at the bottom. The outside of the bag can be embroidered, if desired, and if such

should be the case, it must be done before putting the lining and outside together.

The bag may be used, if one pleases, for slippers only, and for this purpose handsomer material should be chosen.

Black satin for the outside, with gay flowers painted or embroidered upon it, and the lining and ribbons of cardinal satin, the binding of narrower satin ribbon.

They are very useful, and much prettier and less clumsy than the ordinary shape in which shoe-bags are made, and also require but a small space where they may hang.

M. E. WHITEMORE.

Milking-Stools.

THE kitchen and laundry have already been invaded and articles brought from them to decorate for use or ornament, and now at last the dairy is reached, for milking-stools are seen among the novelties displayed in the art needlework shops. They are low, three-legged wooden stools, which cost but forty-five cents, and can be purchased at almost any of the stores where fancy work or the materials for it are sold.

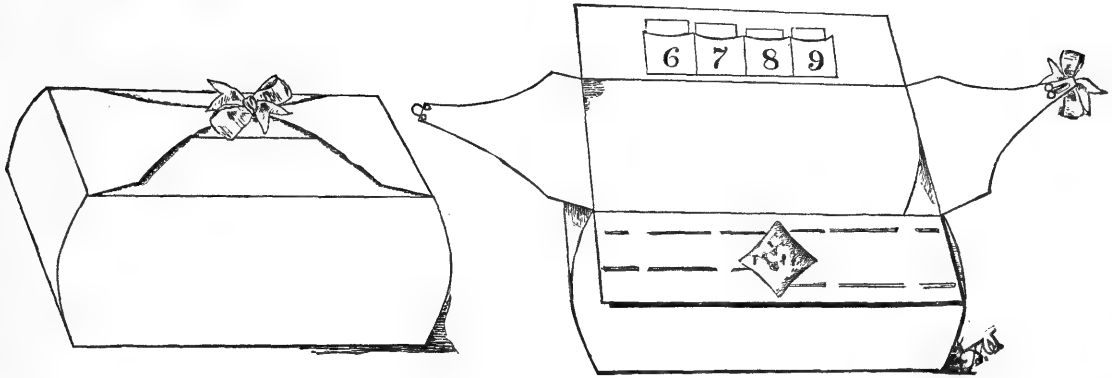
The legs of the stool and rim of the seat are gilded with gold paint. Devoe's is an excellent preparation, as it does not tarnish. It is twenty cents a bottle, and two bottles will be required. For those who can use gold-leaf successfully, the expense will be but a trifle more and the gilding will be still more satisfactory.

Paint the seat of the stool within the rim of gold light blue, and upon the blue ground, when dry, a bunch of white field daisies.

Olive, pale pink, and blue satin ribbons are loosely twisted together, and tied from the top of one leg across to the bottom of the opposite one, and a bow made of the



DECORATED MILKING-STOOL.



WORK-BOX.

three colors finishes where the ribbons are fastened to the legs; one is also placed midway on the third leg.

Instead of gilding and painting the seat, it may be entirely covered with plush, if preferred, and the legs only gilded. The plush is drawn smoothly over the seat, and tacked to the wood beneath.

They are very pretty, and useful as well, for they serve as low seats in the library or reception-room.

M. E. WHITTEMORE.

English Fancy-Work.

AMONG the most popular English fancy-work, embroidered lace may be mentioned. White or cream-colored furniture-lace with a raised pattern is best. Trace the pattern in tinsel, and embroider thickly in button-hole and other flat fancy stitches, everywhere except on the tinsel and over the background. Stamped velvet, on the contrary, has the background entirely covered with tinsel, thus giving the appearance of velvet with a gold, silver or metallic background. Colors are now sold woven in with the tinsel—blue and silver, scarlet and gold, &c.

Pillow lace does not find much favor in London as an employment for ladies. The cost of the thread, the expenditure of eyesight, patience and time, render it distasteful to those who only require "ten minutes' work;" and ladies who can afford the cost of the material could afford to buy *real* lace. It is only a very few who find patience and time to "try, try again," when they find the thread snap, the bobbins become displaced and the whole dirty and unattractive. Guipure is easy to do, and on the whole is perhaps cheaper; but of all the home-made laces of which I have had any experience I can most highly recommend Macramé. It is true that the thread is dear (so is all proper lace cotton) and that it whips and cuts the fingers, but at the same time it is quickly worked, and, when finished, very effective.

Beaded collars and cuffs are novel. They should be made of small round beads (gold, silver, or indeed almost any kind and color) and Andalusian wool and No. 18 needles. For the cuffs cast on fifteen stitches; knit one plain row, then a row putting a bead up to every stitch except the first and last; then a plain row, and another

with beads. Repeat until the strip is long enough to slip over the hand; then knit one plain row and bind off. To knit the collar, cast on five stitches; knit first a plain row; next a row with beads; in the third row make one by knitting two in the first stitch, then knit plain to the end of the row. Repeat until you have ten stitches. Alternate bead and plain rows until the collar (about two inches wide) will meet round the neck. Then decrease one in every plain row as you increased before, until you have five stitches; then knit one plain row and bind off. These collars and cuffs, if properly made, have almost the effect of necklaces and bracelets. In the October number of THE FLORAL CABINET directions are given for knitting purses; these, it is perhaps unnecessary to say, are greatly improved by the addition of a few beads knitted in.

LEIRION.

Work-Box.

THIS convenient little work-box is just large enough to hold everything that is necessary to sew with, and not large enough to be filled with other things. The foundation for the box is cut out of pasteboard, and there are nine pieces in all. First, cut a piece for the bottom measuring four and a half inches wide by six inches long. For the long sides cut two pieces seven inches long and three inches wide; curve these on the ends so they will measure six inches on the long sides, to correspond with the bottom. Cut the end-pieces five and a half inches long and three inches wide; curve the ends of these to match the ends of the sides. The lid is cut in two parts, each measuring six inches in length by two and a quarter in width. The handle is formed of two pieces three and a half inches long by four and a half wide. Curve them on the side that measures three and a half inches, as seen in the illustration. The pieces may be covered with satin, cashmere or even a pretty cretonne, using a dark color for the outside and something bright for the lining; cashmere, however, makes the most durable covering.

The outside and lining should be a quarter of an inch larger than the pasteboard, to which it should be basted; turn the edges in and overhand them together neatly. When all are covered join the long sides and the ends together first, by overhanding them neatly on the outside;



SACHET MADE OF CHRISTMAS CARDS.

then sew the bottom in place. The lid is kept from falling in by being overhanded firmly on the outside. Lastly, sew the handles on the ends of the box; fasten a hook and eye on the point of these pieces to keep them together when being carried about, and place a bow of ribbon on the top. A little pincushion is fastened on the inside of one half of the lid and a piece of ribbon, divided into four little pockets for papers of needles, is sewed on the other half.

E. S. WELCH.

A Sachet in the Form of a Book.

ONE of the nicest ways of preserving choice Christmas or Easter cards is in the form of a sachet which is made of an even number of cards of uniform size. The cover for them is of cardboard which, when folded together, is cut half an inch larger than the cards. Baste a piece of cotton batting, which has plenty of sachet powder sprinkled over it, on the outside of the cover; leave space between the pieces of cotton so the book will fold together nicely; cut a covering of satin one inch larger, baste it on and draw it smoothly over the edge and paste it down on the inside; then paste a couple of cards on, leaving just room enough between them for the book to fold together.

When only one leaf is to be used, paste two cards together back to back, with a narrow piece of satin folded and pasted between them on the sides where they are to be bound; slip a narrow ribbon through this and tie it in a bow on the outside.

If two or more leaves are used, join four cards with a strip of the satin; lay them in and tie the ribbon around them. Paint a spray of flowers on the outside and you will have a handsome sachet and keepsake. In any case where painting is necessary, if one cannot paint, they will find a good substitute in the improved decalcomanie or silk ornaments which come prepared for satin or silk.

E. S. W.

Decorative Notes.

A NEW and exceedingly effective design for a mantel lambrequin is composed of cone-flowers in their natural size worked on dark olive-green plush. A strip of the plush sixteen inches deep and the length of the mantel-shelf extends straight across the front. From the bottom of this strip and extending nearly to the top the cone-flowers are gracefully arranged, the leaves worked with fine chenille and the yellow petals with two shades of ribbosene, the dark-brown centres of the blossoms in knot-stitch with embroidery silk. Tassels of green ribbosene, with full, yellow heads, finish the lower edge. A straight strip of the green plush is laid across the mantel-top and hangs down on each end a trifle lower than the embroidered piece across the front. These ends are lined with yellow satin and trimmed on the bottom with the ribbosene tassels. The effect of the yellow cone-flower and the odd tassels is unusually rich, and forms one of the handsomest designs that it has been our pleasure to see this season.

A novel needle-case to stand on the dressing-table is made in the shape of a small pyramid, its three sides each measuring five inches at the base, and five inches in height. Cut three pieces of this size from pasteboard, and cover them on one side (for the outside) with light green satin. Overhand them neatly and firmly together, so they will form the pyramid shape with an opening at the bottom. On the centre of one of the sides fasten a couple of cashmere leaves, button-holed on the edge with green silk, to hold needles; on another side arrange a place for court-plaster, and on the remaining side a ribbon



PHOTOGRAPH CASE.

loop through which to slip a pair of tiny scissors. Now, cut three pieces of pasteboard the same general shape as the ones formerly cut, only smaller, measuring three inches at the bottom and four in height. Cover these on both sides with dark green satin, paint a small floral design on each one and attach them to the apex of the pyramid to hang over the sides and cover the sewing utensils. As these pieces are only fastened at the apex, they can be readily slipped aside when the needles or scissors are wanted. The pyramid is fastened at the bottom to a circular piece of heavy pasteboard covered with dark green satin. The piece should be a little larger than the base of the pyramid. C.

Photograph Case.

THIS little arrangement for holding a few photographs will be welcomed by those who like to keep favored ones in sight. It is also a pretty decoration for the wall or mantel, and makes a very appropriate little gift for a gentleman friend, who perhaps has been supplied with pocket pouches, slippers, smoking-caps, &c.

The foundation for it is made of a piece of heavy

pasteboard or thin wood eleven inches long by five and a half wide. Cover one side of it with a layer of scented cotton. Satin of any color may be used for the covering, but a very light shade of green forms a particularly pretty combination with the dark green leaves and red berries.

Draw the satin smoothly over the board and glue it on the back; glue a piece of muslin over that, and, if to be hung on the wall, screw a couple of rings in near the top to draw a cord through to suspend it. If to stand on the mantel, arrange a bow of ribbon on one corner, as seen in the illustration, and fasten at the back a wire support.

The little corners are cut out of cardboard and covered with dark red velvet on one side and satin on the other overhand them neatly to the back. A branch of natural holly leaves is prepared for the decoration in this way: Separate the leaves from the branch and press them carefully. Fasten the branch on and glue the leaves to it in their natural position. Make a bunch of berries out of wax and paint them red; attach them to fine wires and fasten around the branch. Prepared in this manner they will keep a long time and present a natural appearance. Of course where one can paint, the case can be decorated in that way if desired, or the design can be embroidered. E. S. W.

NEW YORK FASHIONS.

LAST month different seasonable fabrics were described, and we now give some suggestions for putting them together.

In the first place, let our amateur dressmaker always buy *good* lining for the waist and sleeves. Silesia or sateen is good enough for those dresses which are made at home, and from two to two and a half yards will be required, according to the size of the person and the length of the basque.

Use the silesia cross-way of the goods—that is, so that the bottom of the pattern of the basque is on the selvage. Silesia does not stretch when used this way, and a basque is much more satisfactory when it does not stretch and pull out of shape.

Suppose that the goods decided on are of wool—two kinds; one the plain homespun or camel's hair, or other smooth-faced goods, and the other astrachan, or, bouclé cloth. If a dress alone is needed, buy two yards of the rough goods and six of the smooth. (A jacket or coat takes two yards, and is always of the rough goods.)

The skirt must have a foundation lining of alpaca or cambric, faced at the bottom on the right side five or six inches deep with the plain goods, and on the wrong side with linen canvas seven or eight inches wide. Over this canvas, three or four inches deep, beginning under the braid, put alpaca. This sheds dust and dirt and keeps moisture from affecting the stiffening of the canvas. Some ladies may think that all this is too much, but all French dressmakers finish the bottom of their skirts in this way. The skirt should be from eighty-two to ninety inches wide—*no more*.

Then cut the pleating. It is not necessary that this

should go across the back breadth at all. Cut three breadths seven inches deep, and one twenty inches deep. Now cut this last in two *lengthwise* at the fold in the goods. Put them together thus, one of seven inches, and one half breadth of twenty inches, then another breadth of seven, and then the other deep half breadth, then the third narrow breadth. Make one edge even, of course. Then hem this even edge, and pleat into a space of fifty-four inches which should cover the front and side breadths of the foundation skirt. The pleats should be side pleats, one inch wide, and should all turn toward the front. The long pleats should come over the seams in the skirt.

Now cut from crinoline the shape of the front and side breadths, like the foundation, only two or three inches shorter *at the bottom*. Cut the rough goods to fit these, and face the front and bottom edges of the side breadths, and the entire front breadth (except the top) about one inch and a half deep, first, however, sloping away the breadths, on the lower part of the joining seams, to the depth of fifteen or sixteen inches, so that when the breadths are put together they will fall apart a few inches at the bottom and show the deep pleating on the skirt.

Then put these on the skirt, the front breadth first, being careful to have the centre of the breadths *exactly* together. Fit on the side breadths, making them come *well up* to the front breadth. Ornament these and keep them together, either by clasps or large buttons, set on either side of the seam to look like clasps; three clasps, or six buttons, on each seam, the lowest one just where the breadths begin to separate.

Make two large double or triple box-pleats of the smooth goods for the back. They must come to the bottom of the skirt, and within thirteen inches of the top. This will require one breadth and a half of the material. The pleats must be well taped to hold them in place, and stitched across the top to the skirt, below the slit in the back of the foundation skirt.

Above these pleats is a puff of the plain goods, which goes to the waist and finishes the back. One breadth is enough in width, and it must be twenty-seven inches long. Sew this breadth plainly across the top of the pleats, leaving the surplus cloth in the middle; then draw up this surplus cloth inside and tack it to the hem of the slit; now sew up the sides and put all the fullness that remains in the top, except eighteen inches in the centre of the breadth at the top. Hem this, and pleat vertically on the old of the goods, so as to draw the fullness up. Place a

hook here, and an eye on the end of the belt, upside down, into which the hook must fasten. This makes a pretty drapery, and obviates the danger of showing the bustle or underclothing through the slit.

The basque must be short. In cloth it is best to finish it in the back, either plain, to fit smoothly over the tournure, or in two double-box pleats, pressed very flat. A narrow vest and a high collar of the rough goods finish the basque, and a clasp to match those on the skirt is a pretty finish for the collar.

If cuffs of the rough goods are liked, they should be left open a little way on the outside of the sleeve and held together by clasps. Small buttons, to match the clasps, are down the front of the basque, set very close together.

This is one of the most stylish and popular models for any of the fashionable wool goods. MELUZINA.

HOUSEKEEPING.

Dolly Varden Cake.

Three eggs, beaten separately, two cups of sugar, two-thirds of a cup of butter, one cup of sweet milk, three cups of sifted flour, one level teaspoon of soda and three teaspoons of cream of tartar, measured more scantily than the soda. Cream the butter, stir the sugar into it, add the yolks well beaten, and gradually stir in the milk. Make the soda fine with a knife before it is measured and sift it and the cream of tartar with the flour. Beat the whites to a stiff froth, and add after the flour has been stirred in. Divide the cake in two parts. In one put one cup of seeded and chopped raisins and half a cup of currants; rub the fruit in flour to keep it from settling to the bottom. Flavor with one teaspoon of cinnamon, half a teaspoon of cloves and a quarter of a grated nutmeg. Flavor the white part with lemon and bake in layers. Make two layers of each and put together with icing, alternating the light and dark.

Cream Pie.

Scald one pint of milk in a double boiler. Wet two even tablespoonfuls of cornstarch in a little cold milk, add the yolks of three eggs and three tablespoonfuls of sugar and beat with an egg-beater till very light; then stir into the scalding milk. Flavor with lemon and let it cool. Line a pie-plate with a nice crust and bake it. Then fill with the cream and make a meringue of the whites of the two eggs beaten with two tablespoonfuls of powdered sugar. Cover the top of the pie with this and set on the upper grate of the oven until the meringue is a pale straw color.

Muffins or Drop Biscuits.

One quart of sifted flour, three heaping teaspoonfuls of baking powder thoroughly mixed and sifted with it, also one-half of a teaspoonful of salt and one level tablespoonful of sugar. When the dry ingredients are mixed, work one tablespoonful of butter through them. Enough milk will be needed to make a stiff batter, just stiff enough to keep

its form, and yet soft enough to take up with a spoon. It will answer to use part water, requiring in all about a pint of wetting; but as different kinds of flour take more or less wetting, the quantity must be determined by trying. Have ready some muffin-rings well greased, or, if they do not form a part of your kitchen furnishing, use a dripping-pan and drop the muffins on with a spoon in oblong cakes, leaving room between for them to rise. They will bake in ten or fifteen minutes in a hot oven.

Baked Hash.

Take any kind of cold meat and chop it not very fine. To one pint of the chopped meat, add one half as much cold mashed potatoes, two tablespoonfuls of bread-crumbs, the same quantity of butter. Moisten all with a half cup of water; season with salt and pepper and bake half an hour. Do not use too deep a dish to bake it in.

Economy Cakes.

These can be made of almost any left-over food, providing the different kinds are such as combine properly. Any kind, or any number of kinds, of meat can be used; any bits of cold rice, potatoes, crumbs of bread, cold cooked eggs, an onion, hominy, gravy, and so forth. Of course it will be better if one-third of the ingredients is meat, but less will answer. It will depend on the skill of the cook to make it a success rather than on any furnished recipe. If there is no gravy on hand a sauce must be made of butter, flour and water, as the mixture must be just moist enough to make out into cakes. It will be a failure if too dry. An egg will also be needed to combine it, and a little onion juice and plenty of pepper and salt to season it. Chop the ingredients fine and make out in small, thick cakes, like codfish cakes, and fry on a griddle. Drippings from roast-beef or the fat from marrow-bones is nice to fry them in.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

Beware of Sharp-Edged Tools.—When I was a boy, my father, who was something of a veterinary, used very often to have open his case of knives and other instruments; among them, I well remember there were several lances, and he always warned me to be careful of all sharp-edged tools, especially a *lance*, because it cut on both edges. I have not forgotten those warnings, and for the past three years I have frequently seen in THE FLORAL CABINET, at intervals of a few months, an "F. Lance;" so, as a matter of duty, I have been very careful and have always found that this "Lance" is no exception to the rule, as far as cutting goes. What I really wish to say, however, is this: that in the December number of THE FLORAL CABINET, "F. Lance" has spoken so frankly about the Society of American Florists' proceedings, pointing out the possibilities of its future, prompting it to do that which is right and speaking plainly of his experience in buying plants wrongly named, that I feel it my duty to thank him. The very fact of such incorrect naming of varieties, coupled with the difficulty of many florists not being in a position to verify them, was one of the reasons for establishing the society. It must be remembered that the Society of American Florists has yet only *cotyledons*: wait until there are a few *true* leaves expanded, and then I hope it will do good alike to the florist and the amateur.

It is to such as "F. Lance" that we owe our business, and whenever it is necessary, I hope he will get a keen edge on his weapon and cut deep.

JOHN THORPE,
President Society of American Florists.

* * *

Thanksgiving Day of 1885 was one that will long be remembered by the flower growers that supply the New York florists, for never before on a Thanksgiving Day—if on any other day—did flowers bring so high a price in the market and find such ready sale. The growers had hard work to believe the stories their agents told them—of Mermet roses bringing \$20 per 100, Bennetts \$75 per 100 and small bunches of chrysanthemums selling at fifty cents each. But such were the facts, and interesting ones, too, for they show plainly that flowers begin to be appreciated; in fact, they are as necessary as the turkey—the all-essential element of thankfulness. It is a step forward when there is as much money spent on the beautiful as on the appetite, and it is a far better indication of the true spirit of Thanksgiving when wealth contributes to taste instead of thirst.

* * *

Hyacinths in Glasses frequently become, by the time the flowers are beginning to expand, so weak and spinning that the leaves fall about and hang over the sides of the glasses, thus presenting a decidedly unsatisfactory appearance. The cause of this is an insufficiency of light, and it may, therefore, be advisable to direct special atten-

tion to the fact that the plants in glasses, in common with those grown in pots, should have a light position from the time they commence to make new growth. It is advisable to keep them in a cupboard or other place from which the light is excluded until they are well furnished with roots, but immediately the leaves begin to push they must be put into the fullest light possible, and a place in a south window is decidedly preferable. It is only by giving them a position where they will enjoy a little sunshine occasionally that the leaves will obtain their proper color and substance and the flower spikes the necessary degree of strength. The greater the height they attain the poorer will be the appearance presented, and every endeavor should therefore be made to keep the foliage dwarf and the flower spikes to a moderate height.

* * *

Tulips.—Now that the tulip has become a favorite flower for florists' use, there is no little strife among the growers to be the first in the market, in order to secure the highest prices. John Reid, Esq., Jersey City Heights, distanced all rivals this season by sending in choice flowers on the first day of December. They were *Duc Von Thol* in variety, white, yellow and scarlet.

* * *

Pennsylvania Horticultural Society.—The president of this society, J. E. Mitchell, Esq., has sent out the following card, which will be read with pleasure by the many friends of the society. If there is a horticultural society in this country deserving success it is this, for a more hospitable, hardworking, intelligent set of men were never found in one organization.

"The display just closed is the most successful the society has held for several years past, which is largely due to the exertions of the press in our behalf and to the appreciation of the public at large, as shown by their encouragement in sustaining these beautiful displays, which tend to elevate the public taste and encourage a love of the beautiful in nature."

* * *

The New York Horticultural Society.—The annual meeting of the Society for the election of officers only, was held in Horticultural Hall, December 8. With the exception of some few changes of minor importance the old board of officers was re-elected. The attendance was small, and but little enthusiasm manifested. We will say, however, and with much pleasure, that there is a seeming determination on the part of those who are best fitted to speak and act to go to work with a will that always insures success. Certain it is that New York *can* have a Horticultural Society worthy the name. The question is, *will* it? We anxiously await the answer.

* * *

Chrysanthemums at the Farmers' Club.—The last, if not least, of the chrysanthemum exhibitions for the season was made at the regular semi-monthly meeting of the

Farmers' Club of the American Institute. There was but one exhibitor, Richard Brett, gardener to J. R. Pitcher, Esq., of Short Hills, N. J. And to show the capabilities of the chrysanthemum for cut-flowers, no other was needed. In itself it was a complete collection, all the well-known varieties being represented, besides some of Mr. Brett's seedlings, one of which has been awarded several medals, and has placed Mr. Brett well up in our list of chrysanthemum growers. The true appreciation of the flowers was a prominent feature of the exhibition. We were informed that very nearly all in attendance were farmers, which speaks well for them, as it has never been our pleasure to attend an exhibition of flowers which was more highly appreciated, or where flowers were better understood.

* * *

The Turkish Ambassador sailed on Saturday, December 20, taking with him for the Sultan and his own garden a collection of gladioli, dahlias and chrysanthemums, from Messrs. Hallock & Thorpe. The Ambassador is a great lover of horticulture, and informed Mr. Thorpe that the Sultan is passionately fond of flowers.

* * *

Morning-Glories for Window Plants.—We are asked repeatedly for the best climbing-plant for the living-room, the best plant for a hanging-basket, or the most cheerful plant for winter blooming. To all these questions we reply, the common morning-glory, *Convolvulus major*, the best known of all twining plants, and one deserving all the praises that have been heaped upon it. As a window plant for winter blooming it is a success, as it grows freely and produces graceful flowers in abundance. Besides, the morning-glory in the house has the advantage over those grown outside, inasmuch as their flowers remain open nearly the whole day, and again they are not such rampant growers as when planted in the border.

* * *

English Names of Plants.—The following will undoubtedly please many who think botanical (correct) names worse than useless. We like to gratify all classes, but must insist that scientific names are a necessity, and, when fully understood, they are very instructive.

"Latin names must ever be used first and always, but there is a large and intelligent class who cannot learn, or care not for learned nomenclature. Besides, it is in the vulgar tongue that all the poetry, the sentimental, the cherished associations of home and country and of friends reside. The very name of the field daisy calls up the genial spirit of Chaucer and the pathos of Burns. Speak of daffodils, and the names of Shakespeare and Wordsworth and Herrick stand writ on their golden petals more firmly than if writ on brass. I think it was Leigh Hunt who said that no fairies ever swung themselves in the bells of the wild hyacinth in his time, and when asked why not as well as in the time of Shakespeare, he said the dreadful language used by botanists in speaking of innocent blossoms drove them all away!"

* * *

Are Living Plants in Rooms Healthful?—The general impression seems to prevail that growing plants in the

house are injurious to health, and we know of many instances where they have been turned out of doors simply because their influence on the atmosphere was considered deleterious. This conclusion seems very strange when we take into consideration the fact that but for vegetation we could not exist at all. The leaves of plants, trees and shrubs purify the atmosphere upon which we subsist, restoring it to its normal condition, rendering it healthy and salubrious when vitiated by the breath of animals. The plant feeds upon that in the atmosphere of the living-room that is injurious to us, and in return gives us an atmosphere adapted to our necessities. It is by no means uncommon to hear this objection raised against plants by him who is constantly poisoning the atmosphere with tobacco smoke. While we are confident the plant in the living-room does far more good than harm, we are also confident that the moral influence the geranium exerts upon the household is far greater than that which evolves from an old pipe, or even the best Havana cigar.

Our views upon the healthfulness of plants in the living-room is fully confirmed by the following, from *Gardening*, an English periodical:

"Such experiments as have been made to test this matter have been directed rather to the discovery of the amount of carbonic acid given off by plants at night than to the general composition of the air of the rooms in which they were located. As a matter of fact, no sufficient reason has ever been assigned for excluding plants from rooms, though it is well understood that some plants—those exhaling certain powerful odors, for instance—should not be kept in bed or other rooms unless the apartments are well ventilated. The question, so far as the production of carbonic acid is concerned, is of little moment, for the quantity of that gas given off during a night by any conceivable number of plants likely to be placed in a room is so small as to be practically harmless. On the contrary, it has been proved that flowering plants are health-producers, owing to the amount of ozone generated by them, and it has been asserted that, however produced, there seems no difference of opinion as to the value of ozone in our atmosphere, for the majority of chemists are agreed that it is the 'great purifier,' and not one attributes to it any deleterious influence."

* * *

A New Enemy to the fuchsia has made its appearance, which bids fair to destroy the entire stock, unless some effectual means are found to exterminate it. It evidently belongs to the beetle family; it is about one-eighth of an inch in length, of a bright green color: while under the microscope it appears to be incased in a coat of mail, the groundwork of which is a steel blue, splashed, dotted and burnished with gold and silver. Its habit seems to be to bore several holes through the leaf, and while it consumes but a small part of the foliage, the plant attacked very soon withers and dies. Our attention was first called to the work of this insect while visiting a Cincinnati florist whose entire stock was ruined. In this case Paris-green was used, but to no purpose. Can any one name this pest, or state the best method of preventing its ravages?—*H., in American Florist.*

ANSWERS TO CORRESPONDENTS.

Begonias.—*Mrs. M. C. W., Ohio.*—Your questions were mostly answered in the December CABINET. We will add that the plants usually thrive in the temperature that best suits the geranium, only they require less sun. The *Rex* section are not suited to house culture. The flowering varieties should be kept in rather small pots to bloom well. *B. metalica* is worth all the rest for the window-garden; it is easily managed, does not seem to care for much rest, and is at all times ornamental. If grown for its foliage only, there is no plant more beautiful, and when in bloom it is grace and beauty combined. It is, moreover, a constant bloomer; plants have been kept in flower without the slightest interruption for more than fourteen months.

Pelargonium, Fred. Dorner.—*Same.*—All of this class of pelargoniums are spring-flowering plants; after blooming they should be grown on through the summer and given a partial rest in autumn. Re-pot in December, cut well back and start into growth in moderate heat. Do not let them suffer a check, and guard well against insect enemies.

Moss Rose.—*Same.*—Cut back just before it starts in the spring; yours must be an exception to the rule if it does not throw up young shoots from the roots. Producing *suckers* is a weakness of roses in general, and if yours does not, fine flowers will be the reward. Feed it well and you will be satisfied with its growth.

New Rose, Sunset.—*Same.*—Yes, we consider the Sunset in all respects as hardy and vigorous as the Safrano; besides, its flowers are of a richer shade, and are of more substance. Plants are materially benefited by a change of position in the window at least once a week.

Narcissi.—*Same.*—It is a mistake to think they will be permanently injured if moved when in bloom. They should, however, remain undisturbed for many years, and will bloom much better for no interference.

Plants for a Room with a Northern Aspect.—*M. M. S., Ohio.*—It will be labor lost to undertake the growing of flowering plants, as a class, in a room where there is no sunshine. As your window is large, fill the space with ferns and begonias. For the former take adiantums in variety, and the best of the latter is *B. metalica*, one of the most charming plants under cultivation for the house.

Hyacinths and Crocus.—*S. F.*—As your bulbs are nicely sprouted, it will be well to examine them to see if the pots are well filled with roots, and if so, water thoroughly and gradually give them light and heat. It is not a good plan to bring from a dark cellar into full sunlight, but much better to shade them a day or two, after which they will bear all the sun you can give them. Do not economize in the use of water after they commence rapid growth. Growth is quickly checked if the roots get dry, and from which they rarely recover. Both hyacinths and crocus will be greatly benefited with a little stimulat-

ing food. Add a teaspoonful of guano to a gallon of water and apply once a week, and you will receive in return much finer spikes of bloom.

Strength of Guano Water.—*Subscriber.*—For plants grown in pots, the guano should be mixed with water at the rate of one ounce to six quarts of water. But we should not advise its general application until toward spring, when the plants are in full growth and the soil somewhat exhausted. It can be profitably employed at any time on callas or other plants that are vigorously growing. It is very strong plant food, and should only be given to such plants as can digest it readily.

Keeping Fancy Caladiums through the Winter.—*A New Subscriber.*—As soon as the foliage shows signs of decay, lay the pots on their sides in any convenient place where the temperature does not fall below fifty degrees; a higher temperature would be preferable. Let the bulbs (corms) remain in the pots until they show signs of growth, when they should be divided, if an increase of stock is desirable, and re-potted in a coarse, rich soil, and grown on as rapidly as possible.

Dinner-Table Decorations.—*Æsthetic.*—Yours is a troublesome question to answer. We try in all cases to furnish information, but we cannot undertake to furnish taste. In all floral decorations much depends upon what you have to do with; if you have, as you say, fine plants of *Adiantum cuneatum* growing in pans, put as many on the table as room will permit and your decoration is complete. In addition to these, the few roses you have can be arranged in small vases with good effect. Do not put your whole conservatory on the dining-table; neither pile up your plants and flowers in such a way as to obstruct the view and hide one person from another. If you have plenty of flowers, arrange in a tall vase with a broad base, using light, graceful spikes or sprays of flowers and ferns on top, and fill the base with roses and such other flowers as you may have, but do not give them an elevation of more than six inches. For the dining-table let the decorations be airy and graceful.

Camellias.—*H. H. A., Nevada.*—No, you cannot make the camellia thrive in a library, even though it may be cool. In order to have it flower well a cool, moist atmosphere is necessary; a dry one is fatal to it. You do not require a regular greenhouse, providing you can get a moist atmosphere without it.

Lilies.—*Same.*—Yes, they will thrive splendidly in a partially shaded situation—in fact, nothing suits them better. As for the snow remaining so long on the ground, nothing could be more beneficial, as there is no better mulching. What injures lilies is alternate freezing and thawing. All varieties are worth growing; we think the species known as *L. lancifolium* possesses more valuable points than any other.

LITERARY NOTES.

—The Queen of Roumania has written three articles, giving glimpses of the country over which she reigns, for the *Youth's Companion*.

—The Columbia Bicycle Calendar, just issued by the Pope Manufacturing Company, of Boston, is useful as a calendar, beautiful as an ornament and interesting as a collation of pithy sentences on wheeling. The daily calendar slips are mounted upon heavy board, upon which is exquisitely executed, in water-color effect, by G. H. Buek, of New York, a charming combination of cycling scenes.

—Christine Nilsson, the famous prima donna, has written an article on "The Right and Wrong Methods of Teaching Singing" for the *Youth's Companion*. This is her first appearance as an author, but her article is said to be of remarkable value and interest.

—Gen. Beauregard will give a history of the Shiloh campaign in the January number of *The North American Review*. He claims that Gen. Algernon Sydney Johnson acted only as a corps commander at Shiloh. Gen. Beauregard emphatically asserts (contrary to the common belief) that he was the sole commander on both days, and, without naming them, controverts the reports of Grant and Sherman as to the nation's forces being taken by surprise.

"INDUCING PHYSICIANS NOT TO PRESCRIBE ALCOHOLICS."

The above was the title of a paper read before the National Convention of the Women's Christian Temperance Union on November 2d, 1885, in Association Hall, Philadelphia. It may therefore please the members of that splendid organization to know of the great—the wonderful—success of a new treatment of disease which entirely supersedes the necessity of alcoholics. For sixteen years the "Compound Oxygen Treatment" of Drs. Starkey & Palen (who have more patients on their records than any other regular physicians of Philadelphia) has been used successfully in the cure of various forms of chronic maladies, and in no case has the use of alcoholics been a necessity.

From every one of the States and Territories from which the delegates in that Convention came have come testimonials from patients to the wonderful effectiveness of this new remedy in curing them. And all were cured without the prescription of alcoholics! Some of them speak of the removal of a desire for stimulants, and in a few cases the entire release from bondage to morphine has been one of the results. The following-named persons are among those who report cures:

Mr. John Armstrong, of Lyons, Nebraska, aged 70, cured of dropsy; Rev. Charles F. Bird, Wentworth, Nova Scotia, cured of nervous prostration, after being disabled from preaching four years; Rev. G. W. P. Brinckloe, Hulmville, Pa., cured of dyspepsia and debility and nervousness of several years' standing; Mrs. C. C. Cady, of Cady's Commercial College, New York City, cured of catarrh; Rev. John H. Chandler and wife, missionaries thirty-eight years in Siam, cured (after return) of malaria and nervous derangements; they are now living in Camden, N. J.; Mr. Alonzo Clark, of the firm of Davis, Collamore & Co., of New York City, cured of inflammation of lungs, after being given up by physicians to die; Rev. Charles W. Cushing, D.D., editor of the *American Reformer*, New York, cured of nervous prostration; Mrs. Mary A. Doughty, of Jamaica, Long Island, cured of nervousness and sleeplessness and dyspepsia; Mr. George W. Edwards, St. George's Hotel, Philadelphia, cured of Bright's disease; Judge Flanders, of New York City, cured of dyspepsia and nervous prostration; Hon. Wm. D. Kelley, of Philadelphia, cured of hereditary catarrh; Mrs. Mary A. Livermore, the celebrated lecturer, restored to "nearly uninterrupted perfect health and vigor after breaking down from overwork;" her address is Melrose, Mass.; Rev. George C. Needham, evangelist, and wife, send letters giving testimony of advantages resulting from Treatment used by their friends and

acquaintances; Hon. William Penn Nixon, of *Inter-Ocean*, Chicago, Ill., cured of disease of lungs; Frank Siddall, of Philadelphia, cured of nervous and physical prostration; W. H. Whiteley, Philadelphia, cured of sciatica and nerve prostration.

In the use of the Compound Oxygen the patient takes Nature's simple plan and follows it. Let us see what that plan is:

When the life-blood has made the circuit of the arteries and veins—before re-entering the heart, to be started on its circuit anew—it spreads over the surface of the air-cells of the lungs, a surface greater in area than the entire exterior covering of the body. Here the air inhaled by the lungs meets it, changing its color to crimson, and imparting to it new vitality. Here kindly Nature has been ever a Healer and Repairer: here modern science finds the proper place to help Nature in the most effective way. Taking the fact that the usual proportions of the mixture of the elements of the atmosphere are the proportions exactly adapted to the needs of the average man in health, and seeing that an extra effort is needed for the sick to repair the waste of vital force in the blood, a different proportion is made in a mixture of the atmospheric elements—a lesser quantity of Nitrogen is put with a larger portion of Oxygen. When this "Compound Oxygen" is used, the blood enters the heart with increased vitality. That organ receives a portion of that vitality from the blood in its passage, and sends it forth with more force and less wear to itself; the vital currents leave on their circuit new deposits of vital force in every cell of tissue over which they pass, and return again to the lungs for a new supply. This simple story is the rational explanation of the greatest advance that medical science has yet made.

"The Compound Oxygen Treatment," which Drs. Starkey & Palen, 1529 Arch Street, Philadelphia, have been using for the last sixteen years, is a scientific adjustment of the elements of Oxygen and Nitrogen magnetized, and the compound is so condensed and made portable that it is carried by express to every portion of the country—indeed, it is sent all over the world.

—An exchange poetically observes, "Jack Frost will soon be writing his poems on the window panes." Well, Jack is something of a poet. At least, he makes beautiful rime.—*Boston Courier*.

—OUTINGS AND INNINGS.—This department of the *Philadelphia Weekly Press* is devoted exclusively to amusements for the home circle and the promotion of social intercourse. It has games for the parlor, out-of-door sports, entertainments suitable for church sociables, hints to amusement committees and to young peoples' social clubs, singing games, dancing games, romping games, quiet games, games of memory, games of skill—in fact, all kinds of games. It is a regular feature of the paper and is issued every week.

Send for a sample copy and see what you think of it.

—From *Under the Clock*: "Lady —, of Belgrave square, says: 'I was grievously disappointed by my florist, from whom I had ordered flowers for an evening party, for the purpose of overcoming a stuffy odor in the rooms, which had been closed for some months. At the last moment, before my guests were to arrive, my daughter suggested sprinkling about some Lundborg perfumes, which had just been presented to her by a friend. The result was marvelous; a delicate and delicious fragrance of fresh flowers pervaded the rooms. I now invariably use the Lundborg perfumes for this purpose. They not only give off a charming odor, but purify the atmosphere of the room.'"

—There is no end to the funny things that are seen and heard by the teachers in our public schools. Once a teacher observed a huge blot of ink on a boy's copy-book. "What is that?" he demanded. "Sure, I think it's a tear, sir." "A tear! How could a tear be black?" "Sure, I think was o' the colored boys dropped it, sir." For the comfort of children who know what it is to be "flustered," this is the laughable reply of a very bright and accomplished lady teacher who was passing a purely formal examination in physiology. "Where is the alimentary canal?" was demanded. "Really," was the pleasant reply, "I forget whether it is in Indianapolis or Illinois."—*San Francisco Argonaut*.

A Profitable Investment

can be made in a postal-card, if it is used to send your address to Hallett & Co., Portland, Maine, who can furnish you work that you can do and live at home; few there are who cannot earn over \$5 per day, and some have made over \$50. Capital not required; you are started free. Either sex; all ages. All particulars free.

—"By heavens! that stuff is not fit for a hog to eat," remarked Smythe, as he pushed away a plate of beef-steak at the Jarby boarding-house yesterday at dinner.

"All right. You needn't eat it then, sir," spoke up Mrs. Jarby.—*Goodall's Sun*.

—A Frenchman has made the astounding discovery that there are more bachelors who are criminals than married men. If we may believe the Frenchman, the number of bachelors who are married men is very small.—*Binghamton Republican*.

—FARM AND GARDEN.—This department of the *Philadelphia Weekly Press* is under the care of a practical farmer of ability and experience, who devotes his attention exclusively to making this the best department of its kind anywhere published. In connection with this, the following extraordinary offer is made:

Weekly Press, one year.....	\$1 00
American Agriculturist, one year.....	1 50
and your choice of either	
Household or Farm Conveniences.....	1 50

Total value..... \$4 00

All sent to any address for \$2.25. Send for Sample Copy and Premium List.

—Talk about women being flighty! Look at bank cashiers.—*Lowell Citizen*.

—"Have you two fives for a ten?" asked a well-known man about town to Justice Prindiville, whom he met on the way to court.

"Certainly I have; I can change the bill for you," replied the genial judge.

"Oh, but I have not got the ten," replied the fellow.

"I thought if you had two fives you might spare one of them till to-morrow."—*Chicago Weekly*.



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LADIES' FLORAL CABINET.

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No. 2.



ABUTILON PEONIÆFLORA. Flowers rose-color. (See page 31.)

SPECIMEN PLANTS FOR DECORATION.

FOR the last two months the horticultural periodicals have been full of the wonderful chrysanthemum shows in the large Eastern cities, and the accounts have been read by thousands of ladies with a passing interest, and possibly a silent wish that they could see the wonderful plants, but with no thought that there was a practical lesson to be learned from these and other exhibits.

It has often occurred to me when viewing the poor apologies for specimen plants at local fairs, and even State fairs, that there was a large field for improvement in the exhibits, and I must confess that professional florists make but little better showing than the unprofessional. Many of their plants come in a wilted, dying condition that renders their exhibition a question of doubtful value to the spectator, though it may bring a premium of more or less value to the exhibitor. The amateur's huge rose or other geranium that, from the effects of leaf-mold and soapsuds has become the wonder of the neighborhood, is lifted as carefully as may be, thrust into a box, drenched with water and carted off to the fair, for Jack Frost would soon slaughter all the floral innocents, and the geranium might as well be sacrificed in a worthy cause as fall a victim to the inevitable. Doubtless many would take a different way if they knew how, and it occurs to me to offer one or two suggestions.

Most readers know that florists keep many of their stock plants (more especially roses in pots) in the open air, with the intervals between the pots filled with sphagnum, coal-ashes, or the pots are simply sunk in the ground. This is called plunging the pots. It keeps the earth moist and the roots are subject to less extremes than when the pot is exposed to the air, and the plants grow just as vigorously, with the exception of being shorter jointed.

This practice might be extended, not only to the growing of exhibition plants for rural fairs, but also to specimens to be used for lawn decoration. All that is necessary is a sunken place in the garden filled with sifted coal-ashes, a few large pots (ten or twelve inch), some thrifty bushy plants in the spring, and less care than the same number of plants would take if kept on a plant-stand. The pots can be obtained in most villages of a thousand inhabitants, and they will last many years if carefully handled. They are oftener broken in the winter

time, when empty, than when in use, and I have found that where cellar-room was plenty it was best to set the pots away in the fall with the earth remaining in them. For plunging the pots, a pit sixteen inches deep should be dug and filled even-full with sifted coal-ashes, and it makes a neater job and prevents dust spattering from the rain to cover the surface with sphagnum. The most desirable plants to use are coleus, bushy-growing, free-blooming geraniums, pompone dahlias and dwarf chrysanthemums. Stand plants, such as the abutilon, hibiscus, flowering begonias, and, if partially shaded, rex begonias and fuchsias can also be plunged. A succession of plants can be provided for the lawn by growing in plunged pots, instead of planting in the usual way. For example, some thrifty, blooming geraniums in five-inch pots could be purchased in May and transferred to ten-inch pots and plunged in groups of three as close as the pots will stand in suitable places in the lawn. When the season for planting coleus (June 1 to 10) arrives some pots could be plunged, and about August 1 a row could be placed around the geraniums. Some pompone dahlias and chrysanthemums could also be grown for lawn decoration when they come in bloom.

The plants, being in pots, could be removed to a shed or the house on frosty nights. To persons with means and time, wonderful transformations could be accomplished in a lawn in a single night, with a quantity of potted plants quietly grown in the backyard, until they had developed size, beauty and bloom. In fact, to an ingenious, thinking woman, this way of gardening would be a veritable floral Aladdin's lamp.

The earth used in potting should be two-thirds rotten sod and one-third rotten cow manure, with sand enough to make the dirt loose and porous. For geraniums, however, no sand should be added, as they delight in a strong, rich clay. If the pots are plunged in coal ashes, with three or four inches of the ashes underneath, no drainage is necessary. Those plunged, or to be plunged in soil, should have two inches of broken pots placed in the bottom before filling. This secures drainage and prevents the roots from striking into the soil below. To insure uniformity of development, the position of the pots should be changed a little once a week.

L. B. PIERCE.

THE ABUTILON.

THIS is a very showy and attractive class of plants, valuable because of its adaptation to all kinds of gardening. Abutilons make splendid specimens for the greenhouse, succeed remarkably well as window plants, and are quite as valuable for the open border. Their remarkable ease of cultivation is a great feature of their

attractiveness. They grow freely and cheerfully for everybody, and under almost any circumstances; in fact, the only drawback to their success as flowering plants is that they grow too freely and demand a vigorous use of the knife to keep them within bounds. They must also be kept under restraint at the root in order to have them

flower freely. If well cut in, so as to form compact, shapely plants, and grown in small pots, they will prove continuous bloomers.

Like all other plants, these have their likes and their dislikes; they prefer plenty of heat, light and moisture. Like all other plants they have their enemies, and the aphid (green-fly) appears to be a special favorite with the abutilon, and must needs be kept in check, which can easily be done with frequent applications of tobacco dust and syringing.

This genus is mostly confined to Brazil, where its flowers are highly esteemed as a vegetable, their peculiar characteristic being mucilage, to which may be added a total absence of any unwholesome quality.

A. paeoniiflora, the subject of our illustration, is a native of the Organ Mountains, Brazil, a locality that we are indebted to for very many of our most valuable green-

house plants. We regret that this plant, introduced more than thirty years ago, is now a stranger in our greenhouses, and will probably require a reintroduction, which its merits demands.

The *Gardener's Magazine*, to which we are indebted for our illustration, says of it :

"This abutilon attains to the size of a tree in the warm greenhouse, but may be kept within the bounds of an ordinary free-growing bush, if it is cut back after flowering to prevent undue extension. It is of stouter habit than the average abutilons, with entire ovate leaves of a full fresh, green color, and cup-shaped flowers of a rich, rosy color, the yellow stamens being conspicuous, and making evident its malvaceous relationships. It is matter for surprise, perhaps, that the raisers of new abutilons have not sought aid from the pollen of this fine species, and to some perhaps the mention of the matter may prove useful."

THE GARDEN IN FEBRUARY.

IT is not generally supposed that much work can profitably be done in the garden from Virginia northward during this month; but this opinion is as erroneous as it is common, for at this time the most important of gardening operations should be commenced in real earnest, and the old maxim, "Well begun is half done," never had a truer application than in the making of our gardens. 'Tis true that when our gardens are buried under two feet of snow and not a particle of earth is to be seen anywhere, except in the window-garden, plowing, spading and hoeing are not to be thought of, neither should they be, under any circumstances, until other and quite as important preparations have been made.

Our first work, or pleasure rather, will consist in the laying out of our gardens; even though they may be but a few rods in extent, it is quite as necessary to have some systematic plan, in order that the given space may be the most profitably employed. We should know now just how many feet are to be given to each vegetable and how many to each flower; and, at the same time, we should consult our handbook of experience to ascertain which locality is best suited to the various plants, useful and ornamental, that we wish to grow. We may have made mistakes last year—if so, we must not repeat them; knowing that the rotation of crops is an agricultural necessity, apply the same principle to the garden and reap the same results. To do this, it will be necessary to rearrange all our beds and borders; and how easy and pleasant such work will be in a cosy room while the storm is wildly raging out of doors! This work will be doubly pleasant if it is congenial to *both*, and supremely sweet will it be if there are several little assistants, each eager to give advice, and with a persistent determination to have a little garden of their own, which they should have and be well paid for all the vegetables and flowers they can produce. This will not only inculcate in their minds a love for the garden, but it will also show that there is a value in labor when rightly employed. If every child in our land had a

garden and was taught its true beauty and usefulness while young, a course of instruction would be entered upon that would not only afford true pleasure through life, but would so stimulate thought in a healthful direction that a high and true education would be the inevitable result.

The next important step, immediately following the arrangement of the garden, formation of beds, &c., is the SELECTION of such plants, bulbs, and seeds as are to occupy the places prepared for them. And this is a work of considerable magnitude; how shall it be done? For the general reader there is but one way, and that is a simple one. Consult our advertising pages, where are tempting offers to send catalogues freely to all who apply (with stamps enclosed for postage), and among them will be found the best garden guides published. The cultural instructions of vegetables and flowers in all our leading catalogues are as accurate and concise as can possibly be obtained in any quarter, and the descriptions of plants can usually be depended upon.

There is, besides the information given, a peculiar fascination about seedsmen's catalogues which makes their perusal very enjoyable. Some are a delight to us because of their virtues; others amusing because of their faults. We find in one an array of "novelties" that is truly tempting, until we look over the horticultural journals of the last century, where we find them in all their present glory under another name. This, of course, is an exception to the rule, and is only practised by those who either don't know or don't care. There are constantly new varieties of vegetables and flowers being brought out, and we must look in the catalogues for their announcement. Our seedsmen have learned the value of surprises and the importance of secrecy; that if they wish to take the lead, and the profit as well, in disseminating any new plant, it must not be made known until sufficient stock is obtained to supply the market for at least one season.

No firm that has any regard for its reputation will

offer a new variety until its character has become thoroughly established. Then its importance is twofold; it is valuable because of its intrinsic worth, and for the reputation it gives the firm sending it out. It is a benefit to both buyer and seller.

We have already looked through most of the leading catalogues for the season, and are pleased to say that we notice a marked improvement over those of previous years. They are more complete in all the requisites of a good catalogue; the illustrations are unusually fine; one of roses surpasses any colored lithograph we have ever seen. But we cannot discriminate. We find many objects of interest that we had the pleasure of examining last summer, when they were in perfection of bloom, and we can truly say that the new introductions for 1886 are above the usual average, both as to numbers and quality.

We wish in this connection to say a few words to our readers in regard to the selection of seeds, bulbs and plants for the coming season. As we are somewhat familiar with the business in all its branches, we would urge extreme caution against buying cheap seeds. There is a "Chatham street" in the seed business, and no one can afford to buy poor seeds under any circumstances; the cost of a good article is but trifling, and for that trifle to have your season's labor lost is anything but economy. Beware of those who give you goods at one-half the reg-

ular rates. It cannot be done. 'Tis true, the seedsmen's profits are large in case they have good sales, but their expenses are proportionate, so that the balance-sheet of those who best understand the business is none too heavy. Buy whatever you want from responsible houses, even though their prices may be twice what some may quote; theirs will be the cheapest in the end.

Another important step to take is a quick step; get your catalogues, read them well, digest them thoroughly, which you cannot do in a day or a week, then make your selections, and lose no time in making up your orders and forwarding them. By so doing you will confer a favor on the seedsman and greatly benefit yourselves. It is a mistake to suppose there is an unlimited quantity of any given kind of seed; therefore when you order early you will be the more likely to get what you order, and at the same time to have it of the best quality. In making selections it is economy to choose, of old established sorts, those quoted at the highest price, simply because they will give you the greater satisfaction. Very fine strains of flower seeds are the results of careful selection, and they cost, in many cases, ten times as much to produce as seeds of an ordinary quality. This is particularly true of balsams, asters and pansies; the same rule, too, will apply to bulbs, but in a marked degree to the gladiolus, many of the finer varieties being produced with great difficulty.

VARIETY IN FOLIAGE.

ALL our grounds are gay with bright colors in May, June and early July, and we have a host of trees and shrubs that give us their tribute of flowers at that time, but in the months following the flowers disappear and our groups of trees and shrubs take on a uniform shade of green, and we look in vain for enough color or variety in flower or leaf to brighten up our rooms and make our homes attractive.

The time was when we had little or nothing in flower or foliage to vary the sombre green of our shrubberies and groups of trees late in the season, but the advance in horticulture has brought us many plants with colored foliage, yellow, white, purple, and variegated, with cut-leaved forms, and with late flowers that we can use to give the needed variety in our grounds.

But before we proceed to describe the ornamental foliage plants, it may be interesting to know something of their origin. There is found frequently a single branch of a tree or shrub, or among seedlings a single plant, with a character differing from the others. Perhaps in its colored leaves, or its many peculiarly formed leaves or branches. These are monstrosities of the vegetable world; some are truly monstrosities, and deserve the name; others are beautiful variations from the original.

These variations are more common than one not looking for them would suppose, but they are not always sufficiently marked to be easily noticed.

If the "sport," as the variegation is called, is a seedling, it is separated from the others and allowed to grow

for some years until the character is fully established, for it may after a year or more revert to the original type. If permanent, it is then propagated by budding or grafting. A branch variation is propagated in the same way.

With colored foliage plants, the propagator's troubles often begin at this point, for if the leaf has too much yellow or white the sun will burn it, and the most hardy plants or branches must be selected until one may be found that will stand the sun, or the plant may revert to the original form so frequently as to be of little value. It may be difficult to propagate, or else prove so weak a grower that it must be abandoned.

On the other hand, it may be easy to propagate, and from layers or cuttings new plants can be made, and a valuable variety perpetuated in this simple way by any gardener, but if the variety is very distinct and valuable it is best not to experiment with it for fear that it may be destroyed, but to communicate with some nurseryman who has had experience as a propagator and ask his advice as to the best method of propagation.

Cut-leaved, weeping and pyramidal forms are not so liable to revert to the original type as colored foliage varieties.

Purple-leaved varieties are usually as strong or stronger growing than the green form; variegated ones often weaker.

Some colored foliage varieties, such as the purple beech and golden spiræa, will come from seed, a small per cent.

with foliage as good as the original plant, and the rest showing all variations between that and the green form.

Where it is desired to vary a plain green group of trees or shrubs with a bright spot of color, there are several varieties with bright yellow or variegated foliage that can be used to produce the effect, either by planting among the groups or on the lawn in front with the green for a background.

Among large shrubs the golden-leaved elder, spiræa, syringa, privet, and cornel are all a bright yellow, and hold their color well throughout the season.

There is also a silver variegated elder, with leaves broadly edged with white, that is worthy of a place where a variety of color is desired, but it is not so showy as the golden form.

Another variety, with finely divided dark, glossy, green leaves, is also quite desirable and pretty, and makes a fine contrast with lighter-colored and coarser-leaved shrubs.

The elders will do well in any good soil and also in very wet soil, where other plants will not succeed.

The sweet-scented syringa is an old-fashioned shrub, with bunches of very fragrant white flowers. The golden-leaved variety has, in addition to the flowers, a bright golden yellow foliage that is very attractive, and the plant will take rank as one of the best golden-leaved shrubs.

The golden privet has recently been introduced, and will also rank among the best of the colored foliage shrubs; its leaves have a deep border of bright golden yellow, and the plant is a regular formed, upright grower, with dense foliage that holds on very late in the season. The variegated cornel is also a new introduction. It is a variety of the red-tinged cornel, and in addition to the handsome foliage has very bright crimson stems in the winter.

The variegated weigelia, corchorus, and euonymus are all desirable and well suited for the borders of shrub groups; the corchorus is a very delicate little shrub, with slender branches well covered with pea-green leaves, edged with white, giving it a very pretty silvery tinge.

The *Euonymus radicans variegatus* has a white variegation, with a very pleasing pink shade on the new growth; it is quite dwarf, and is really a climber, but makes a very pretty low shrub.

There are two variegated altheas, one with well-formed single purple flowers, and the other with quite insignificant, dark-purple button-like flowers, which is often spoken of in catalogues as a double purple-flowered variety, as though the flowers, as well as the foliage, were attractive.

The leaves are very much alike in both varieties; they have a broad edge of white and yellow and are very pretty; the plant is not so bright as the yellow shrubs, but it is a very distinct and valuable variety. It is a neat, upright grower, and requires very little trimming to keep it in good shape; it does not grow as large as the green forms.

There are also several shrubs with silvery foliage that

are valuable to make a variety. The buffalo berry (*Shepherdia argentea*) has a leaf silvery on both sides and numerous bright-red, edible berries; the silver berry (*Elæagnus argentea*) of the far West and *Elæagnus longipes* of Japan have silvery foliage and berries. The sea buckthorn (*Hippophaë rhamnoides*) of the sea-coast, south, has silvery-gray stems as well as foliage that is attractive in the winter.

The purple-leaved barberry and hazel are very useful shrubs to make a variety in color; both are as dark as the purple beech, and hold their color well through the season.

For late flowering shrubs we have the altheas, now greatly improved in flower, and many very beautiful shades of red, blue, purple and white can be had.

The *Hydrangea paniculata grandiflora* is now well known; the rhodotypus, introduced within a few years, has a beautiful green foliage and pure white flowers, produced at the tips of the branches all summer long.

The *Hypericum aureum* is a charming native shrub with large and numerous yellow flowers, produced nearly all summer.

The *Clethra alnifolia*, a very desirable native, with abundant spikes of pure white and delightfully fragrant flowers in August.

The *Daphne Cneorum*, a dwarf evergreen shrub with fragrant pink flowers in bunches, should be in every collection of shrubs.

There is naturally more variety among trees, and colored varieties are less needed to make contrasts, unless there are a number of one kind in a group. There are many very beautiful varieties with ornamental foliage among deciduous trees that are worthy of a place in any ornamental ground.

The purple beech is one of the best, and is invaluable in giving color among large trees. There is also a purple birch that is very desirable; the leaves are dark purple and the bark is pure white, making a very charming tree. All the birches are useful to give variety among ornamental trees on account of their colored bark; the white, gray, and English white birch have white bark; the yellow and red birch, rough yellowish and brownish shaggy bark.

Among small-growing purple trees are the purple-leaved peach and plum. The peach is not long-lived, but desirable where a temporary effect is wanted.

The purple plum (*Prunus Pissardii*) is a new acquisition from Persia, and is destined to be one of our best ornamental trees. The foliage early in the spring is reddish-purple, but as the season advances it turns darker, and through late summer and the fall months is very dark. The fruit is crimson and very ornamental. It is a vigorous grower and is easily transplanted.

There is a purple and a variegated variety of the sycamore maple. The first is quite dark-colored, and the last has a very distinct yellowish tinge.

A new golden-leaved poplar (*Van Geerts*) has a clear and distinct yellowish shade, very conspicuous at a distance, in contrast with other trees. The tree is a vigorous grower and is easily transplanted.

The golden-leaved catalpa is very bright, with large

showy leaves, and a vigorous habit, especially when young. This can be used to good effect in many places.

A golden oak is very beautiful, but rather a poor grower and difficult to transplant. The leaves are small, delicately formed and beautifully shaded with bright yellow.

I have not named all of the colored foliage trees and shrubs that are in cultivation, but have made a selection of those that are really desirable and can be easily obtained, and which will produce good effect.

In planting these colored forms, they should be placed

where the sun's rays will fall directly upon them, as the colors are made brighter than if grown in the shade. This is especially true of the golden-leaved forms.

The colors are brightest on the new and vigorous growths, and all colored foliage shrubs should be so cared for that a good growth shall be established each year. Give them a good, rich soil, and each spring cut them back severely; a second growth may often be produced by cutting back again later in the season and stimulating with a fertilizer.

WARREN H. MANNING.

THE ZEPHYRANTHES.



ZEPHYRANTHES CANDIDA.

THIS is a remarkable genus of bulbs properly considered half-hardy. Three of the species are natives of this country, and are hardy as far north as Virginia, and with the protection of a slight covering of leaves are hardy throughout the States. This is a class of bulbs but little understood and pretty generally neglected; under their proper name they were rarely cultivated, but lately one of the species was called an amaryllis, and it immediately grew into favor, as men frequently do when sailing under false colors.

One of our native species, *Zephyranthes Treatæ*, has recently been introduced as *Amaryllis Treatæ*, and is in reality the least valuable of all the cultivated sorts. In saying this, we do not wish to detract from its value in the least, for it is truly a valuable bulb, producing its large, pure white amaryllis-like flowers freely, either in pots in the window-garden, or when planted in the open border. It is a splendid bulb for winter blooming, coming into flower within a few weeks after planting; and, if a number of bulbs are placed in a six-inch pot, they will keep up a succession of bloom for several weeks, and at all times present a chaste and lovely appearance. This is a native of the sandy plains of Florida, where it grows in great profusion. It was first brought into notice by Mrs. Treat, in whose honor its specific name was given.

Z. Atamasco, another species with white flowers, is a native of the Southern States, common from Virginia southward. The flowers of this species closely resemble those of the foregoing and are not unfrequently considered the same. They differ, however, in the flowers, which when partly open are of a lightish pink on the outer side, and also in being more erect. The pinkish shade is not at all noticed when the flower is fully open. The two species are readily distinguished by the difference in their leaves, those of *Z. Treatæ* being longer and rush-like, while those of *Z. Atamasco* are flat and lie closer to the ground. This species is more floriferous, its flowers are larger and its season of bloom is longer. In moderately moist situations it is nearly a continuous bloomer when planted in the border. It is also admirably adapted for forcing for early spring flowers, although the "cut-flowers" are not particularly useful

except for arranging in small vases. But for pot-plants they are very desirable.

Z. rosea, also known as *Amaryllis rosea* and "fairly lily," is a fit companion for the above as a border plant. Its flowers are a lovely pink in color, somewhat larger than the above, with broader petals of much greater substance. We have grown this extensively for the past fifteen years and consider it one of the most satisfactory of all our summer-flowering bulbs. The bulbs are about an inch in diameter and nearly two inches in length and produce their offsets in the greatest profusion. Although a native of Cuba they are nearly hardy in this latitude, requiring but slight protection, which should be freely given, for then they come into flower early in the summer and remain so until after we have had severe frosts, as light frost does not stop their blooming.

Z. candida (see illustration), a native of South America, completes the list of useful species, and is, although last on the list, first in real usefulness. This plant is distinguished by its semi-cylindrical and rush-like leaves, and by its smaller, pure white, upright flowers. The bulbs are quite small, not more than one-quarter of

an inch in diameter and about two inches long, and are produced in large clusters, in which for good effect they should be planted. This is decidedly an autumn flowering plant, commencing in August and remaining in bloom until there have been at least ten degrees of frost. In form the flowers are crocus-like, and are as freely produced, which renders them particularly pleasing at a season of the year when delicate white flowers are rare in the garden. Although a native of the hot climate of Lima, it is quite as hardy as any of our native species, and far surpasses in our own climate any other species in the quantity of flowers it yields.

All of the species are of the easiest cultivation, thriving well in ordinary garden soil with but very little care and attention. Like all other plants they well repay generous treatment. There is but one caution necessary in the planting: that is, not to *bury* the bulbs; they dislike deep planting, and should not be covered more than an inch, under any circumstances; in moderately heavy soils half an inch of covering is quite sufficient. During winter the bulbs of the two latter species may be kept in the same manner as those of the gladiolus, but the two former should be kept in fine, dry sand.

WEeping TREES.

WEeping trees are one of the freaks of nature that can often be introduced very effectively as ornamental features in landscape gardening. Their peculiar habit appears in striking contrast with the normal growth of other trees, and adds a pleasing variety to the lawn or landscape. There are often positions in which tall or medium-sized trees are needed in limited spaces where there is not room for wide-spreading branches. There are varieties of weeping trees that are particularly adapted to just such places, fitting the situation better than anything else. On this account they are peculiarly suitable for cemetery lots, and should supersede many of the large spreading trees that soon overgrow and crowd the spaces they were intended to adorn. The idea of sadness which is usually associated with drooping or weeping trees, renders them doubly appropriate for the solemn associations of burial-grounds.

Weeping trees are now "fashionable," and nurserymen are exhausting their resources to supply the popular demand for "new styles" and varieties. There are one hundred or more trees of drooping or pendulous habit, cultivated for ornamental uses, but many of them have nothing but their abnormal growth to recommend them, and are only interesting to an amateur who desires to increase the number of varieties in his collection. The following list is recommended as containing a few of the hardy and most distinct varieties best adapted for general cultivation, some of which are rare and worthy of much more general introduction than they have received.

DECIDUOUS.

The *Babylonian*, or *Common Weeping Willow*, is the most common weeping tree, and has long been a favorite. It will grow almost anywhere, but prefers moist, rich land.

The *Kilmarnock*, or Scotch *Weeping Willow* is usually grafted about five or six feet high, and does not get any higher, as the branches all radiate from the point of grafting like the reeds of an umbrella, and grow downward until they reach the ground. They should be thinned out and shortened occasionally to keep the head symmetrical and in good condition.

The *New American* or *Fountain Willow* sends out many long, slender branches from the point of grafting, that radiate in all directions, forming a round, globular head of light and airy branches; but as none of them assume the position of a leader, it remains a dwarf tree.

Camperdown Weeping Elm is another low tree that grows downward instead of upward, and must be grafted several feet from the ground in order to allow its branches a chance to grow. They spread and droop in an eccentric way. A well-grown specimen, when in full foliage, bears a striking resemblance to a huge open umbrella. It is one of the very strange freaks of nature that has thus reduced a giant of the forest to a mere pigmy.

Cut-leaf Weeping Birch is a tall, slender tree that attains a large size, rivalling in grace and elegance the well-known *Salix Babylonica*. The trunk is very straight, and is symmetrically furnished with slender, graceful pendulous branches. The leaves are deeply cut on the edges, which adds to the light and airy appearance of the tree. In winter the bark is as white as snow. It is one of the most beautiful and popular trees of pendulous habit, and should be in every well-assorted collection.

Weeping Beech is one of the most grotesque and unique ornamental trees. It has a habit peculiarly its own that is very singular and very effective when it has room to develop its true character. The main stem is

generally erect, or nearly so, but never straight, while the branches tend downward, drooping and twining in strangely tortuous shapes. When clothed with its bright, glossy, green leaves it is handsome, and when denuded of foliage in winter it is an interesting object, more picturesque than graceful. It is exceedingly hardy and one of the best weeping trees in cultivation.

The *Weeping Larch* is a crooked and fantastic weeping tree, with the soft evergreen foliage of the larch. Well-grown specimens of it are beautiful, but it is a slow grower and requires considerable time and care to get it trained into good shape.

Wistaria sinensis and *Acacia rosea* can be made to assume the umbrella form of some of the weeping trees by staking and training them into the desired shape. It requires time and labor to get them established in this way and to keep them so, but when a well-grown specimen in this style is in full bloom it is a magnificent sight.

EVERGREENS.

There are not many really valuable weeping evergreens—*Abies inverta*, the weeping spruce, is the best and most distinct variety. It is a rare but admirable tree that should be more generally planted. It grows tall but very slender, as the branches droop almost perpendicularly, shrouding the trunk with a thick drapery of green. It is exceedingly hardy, never being injured by heat or cold, but retaining a rich, dark-green color through the severest winters. If a tall evergreen is wanted in a narrow space where there is not room for spreading

branches, this is the *best* tree for the position; it is also one of the best for cemeteries, where its formal, sombre appearance seems particularly appropriate for the surroundings.

Juniperus oblonga pendula, the weeping juniper, is a neat, graceful tree, with short, slender, drooping branches, of a very light-green color. It attains a height of ten or twelve feet, but is rather tender, and sometimes is injured (in Pennsylvania) by severe winters.

It is a very pretty tree, and well worth the trouble of slight protection where it needs it.

Juniperus repens and *squamata* are two junipers that are naturally inclined to trail upon the earth. If planted on a mound or at the top of a terrace and allowed to spread they will cover the ground with a thick carpet of dark green and retain their freshness all winter. Or they can be grafted several feet high on the American cedar or other stock, when they will form round heads of drooping verdure, three or four feet in diameter. In either style they are singular and attractive ornaments for small yards.

Retinospora pisifera, hemlock, spruce and occasional specimens of the Norway spruce, have long, slender branches of pendulous habit and form magnificent, graceful trees, although they do not come under the usual acceptance of the term weeping trees. They are all large, vigorous growers and require an area of forty feet diameter for their perfect development.

SAMUEL C. MOON.

FASHION IN FLOWERS.

WE have always experienced a feeling more of sorrow than anger toward that unfortunate Peter Bell, to whom

"A primrose by the river's brim,
A yellow primrose was to him,
And it was nothing more;"

but the materialist described in Wordsworth's somewhat Watts-like verse has many congeners, not a few among the feminine world. When *this* flower must appear at every dinner or dance, while *that* flower—some old-time favorite, perchance—must be relegated to the deepest shade of the conservatory, we may know that it is not the subtle essence of the rose that enchants us—to paraphrase a famous epigram, "*Le style, c'est la fleur.*"

Especially do we notice this since our clever florists have turned the seasons topsy-turvy at their own sweet will; since

"The poor summer flowers
Were forced to come out at unreasonable hours.
Camellias, amazed at the frost and the snow,
Without asking their leaves, were requested to blow;
And gardeners, relentless, awaked the moss-roses
From slumbers hybernant, to tickle the noses
Of maidens just budding, like them, out of season."

Still, fashion in flowers is no new thing, since the sturdy Dutch burghers, who would have regarded mignonette at Christmas with pious horror, as a growth

savoring of witchcraft, were yet ready to spend the last stiver in some wonderful tulip, as long as the extraordinary craze for that bulb lasted. That long-ago tulip mania seems one of the most extraordinary things on record in horticulture.

Not that a fondness for this flower is remarkable—the writer must admit a very decided personal weakness in that direction—but that young and old, rich and poor, prince and peasant should have been ready to barter every possession, every personal honor and rectitude for some rare and much-coveted bulb, shows a strange and almost uncanny fascination, unless we take a more material view and consider it a nervous disease.

What florist does not remember the camellia fever, when every festivity must be crowned by these beautiful, waxen, soulless flowers, japonicas, as the unbotanical public called them. They ranked high in the palmy days of "Boss" Tweed; experienced decorators say that they date their fall from a great banquet given by that magnate, where, as chronicled by an enthusiastic but somewhat inaccurate reporter, "the perfume from the camellias and japonicas was overpowering." Want of perfume, by the way, may be considered the one disappointment in this flower, since none may gain-say its perfect beauty, though a beauty only fitted for the chamber of death. We have seen the rise and fall of many floral favorites since camellias held sway, but

the queenly rose must ever be pre-eminent, in spite of the mutations of fashion. A noticeable fact is the increase of favor with which Dame Fashion regards wild or old-fashioned flowers, such as grew in our grandmother's garden. One grower, we are informed, is forcing sweet peas; others produce clover, snowdrops and anemones. Imagine our fresh-faced field-clover opening its sweet clusters in a greenhouse, together with

"The coy anemone, that ne'er uncloses
Her lips, till blown on by the wind."

The first forced lilacs created a great sensation; they were a decided novelty, and a very charming one. For a season the price paid for these flowers was something extraordinary; many old-fashioned gardens and farmyards were ransacked for good plants, and every florist possessed a fragrant glass-covered grove. French and Dutch nurserymen soon offered pot plants, more desirable for forcing than large bushes, and we still see an abundant supply of these flowers in the florists' shops; lilacs have ceased to be a mania, but they have come to stay. The forced flowers are beautiful and fragrant, but much more delicate in color and texture than out-door blossoms; this forcing is a fearful strain on the plant's system; one winter's growth completely exhausts it.

We are glad to see that the charming, climbing asparagus is not to be a failure; though it received the coldest of welcomes at first from the florists and their patrons it is undoubtedly the coming decoration. It offers the double charm of delicacy and durability, a very desirable combination. I was much surprised by a note in the *American Florist* in which the writer states that he dare not put this plant into a floral design without permission from his customer. "It is asparagus, and you cannot disguise the fact."

Our experience is contrary to this; after once seeing it, customers always desire us to put some of that "feathery stuff" in any designs we make. It is most exquisite when used to veil a funeral design, and lends additional grace to a basket or bouquet, and it is the most charming thing in the world to garland an evening gown. The corsage bouquet, correctly worn high on the left shoulder this season, must have the effect of a drooping garland, and what could be more lovely for this purpose than the asparagus. Smilax is rather out of favor for the choicest decorations this winter. Of course it can never go entirely out of date, but this season, in addition to the asparagus, ivy, or the climbing fern (*Lygodium scandens*) is used for draping. Apparently people are beginning to understand that foliage may be as charming as flowers, since this winter, bouquets are adorned with the slender and highly colored croton leaves; a very happy idea, we think, probably inspired by the craze for yellow as a fashionable color. We are also informed that the city florists introduce into their bouquets leaves of "Heidelberg ivy," formed into clusters, or tied on to the stems with a cluster of small flowers. Would some good Samaritan kindly tell us what "Heidelberg ivy" is? Can it be, renamed and rejuvenated, that dear old friend of our long-lost childhood, the German ivy (*Senecio scandens*), so named by the rule of contrary, we suppose, as

it is not German and is not an ivy? It is chiefly to be found, nowadays, in some old-fashioned household, side by side with "Wandering Jew" and "Creeping Charlie."

Another novelty mentioned by a bright contemporary is "cape flowers." This sounds rather vague and uncertain, but we must suppose that it is the charming little cape heath. Heath has been received with much favor during the past few years; they are very beautiful with their compact growth and waxen bells. In the dim future, if the rage for floral novelties continues, we may see some of our own native ericaceous plants forced; fancy our beautiful, spirituelle andromeda at Christmas-tide—we do not mean the maid of classic story, but the pretty shrub familiar in our woods. Or if, in the winter season, some happy grower could produce great clusters of the rosy white kalmia blossoms, would he not be envied of his fellows?

Undoubtedly the reigning sovereign of the floral world this winter is the orchid—even Queen Rose must surrender her sceptre for a while. Fashion decrees it, not only for the beauty and grotesqueness of the royal family of plants, but because—tell it not in Gath—they are much too expensive to become common; the general public cannot indulge in them. The fashionable bride now carries a loose bunch of orchids and orange blossoms, a very charming combination. Or think of a few sprays of *Lælia*, loosely tied together with stevia and feathery ferns. The stiff, besom-like hand bouquet, in which the poor flowers always seemed to be choking for want of breath, is now relegated to the Fiji Islands, or wherever else it originated, and the present bunch is a loose, artistic nosegay, as our grandmothers would say. Our great tidal wave of æstheticism may be thanked for this; it made people understand that mosaic formalism was not the height of floral art. Before this our florists dared not be natural; their patrons forgot that "the art itself is nature." It is often surprising to those accustomed from childhood to a lavish use of flowers, that so many women of undoubted taste cannot arrange them in a vase or even make a pretty cluster for wearing. Perhaps the faculty comes by use; perhaps it is a birthright, but, either way, it is a power much to be desired. We have seen a girl of more than average taste in matters of dress, deliberately strip every leaf from a bunch of loose roses before putting them in water, a piece of vandalism that affected the writer like deliberate cruelty to some dumb creature. Such a thing makes one think of promoting a "Society for the Suppression of Horticultural Vandals," to whose attention we may devote those unfortunates who *will* call orchids "orchards," and chrysanthemums "artimishals," to say nothing of a host of minor offenders who make the florist's life a burden in a variety of ways. The florist's life is certainly a flowery one, but his roses are well armed with thorns, visible and invisible. Still, he belongs to an honorable and well-organized guild of artists, as well as artisans; he belongs to a great society in unison with itself, and under such favoring auspices he can view with indifference both thorns and—horticultural vandals.

E. L. TAPLIN.

WAX PLANTS AND THEIR CULTURE.

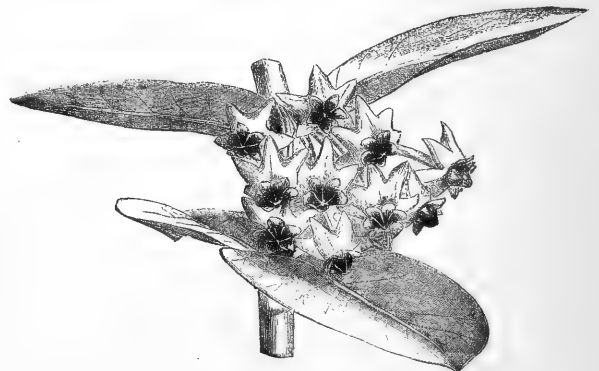


IMPERIAL WAX FLOWER (*Hoya imperialis*).

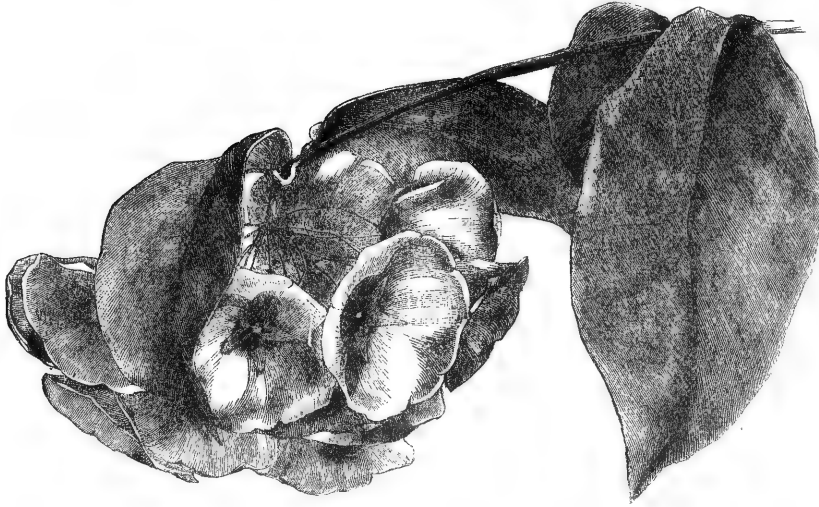
MANY of the hoyas, of which there are about a score in cultivation, have, strangely enough, for years been rather overlooked, although such species as the common *H. carnosa*, or the peculiar buff-colored *H. lasiantha*, or even the old *H. cinnamomifolia*, are certainly some of the loveliest of stove climbers. Among the most attractive kinds the Bornean *H. imperialis* certainly stands foremost. It is the largest and one of the most distinct. The peculiar deep purple-brown color of the inside of the flowers, enlivened by the waxy-white projecting staminal crown in the centre, produces a striking and singular effect. The flowers, which are three inches across, are stout in texture, thick and smooth; they are produced on long pendent trusses, each consisting of about ten flowers. The leaves, as in the generality of the hoyas, are fleshy, and set off the flowers to advantage. *H. stenophylla* is one of the smallest of the genus. It is quite a miniature, and altogether different from other kinds. It requires to be grown in a basket, because its numerous stems, about from fifteen inches to twenty inches in length, are straight and pendulous, thin and flexible, and furnished with a few short ærial, nearly dry, roots. The leaves, which are numerous and alternate, are set from half an inch to an inch apart, and the trusses bear from twelve to fifteen tiny little flowers, which are grayish white, waxy and downy, the central column be-

ing delicate and bright. It is an uncommonly pretty hoyia, and may be employed with advantage for filling up the often unoccupied spaces overhead in our stoves. It flowers in September and October. *H. australis* is a most vigorous and attractive climber, the leaves of which are glabrous, rounded, thick, and deep green, with lighter nerves, being thus somewhat similar to those of the *Stephanotis floribunda*. The young foliage is tender and purplish. The pendulous clusters consist of fifteen to eighteen flowers set on long peduncles. In each flower the five waxy-white divisions are star-like, and the base of each of them is adorned close to the central column with a small violet-purple blotch, which produces on the white ground a very striking effect. It is a free-growing climber, and well adapted for covering bare rafters.

H. bella may, perhaps, be described as the most lovely of all the hoyas, resembling more than anything else a delicate piece of jewelry. It is epiphytal in growth, and should be treated like some of the æschynanthuses and grown in a basket. Its branches are copiously covered with small, thick, ovate, deep green leaves, possessing some resemblance to those of a large-leaved myrtle. They droop gracefully, and each bears an umbel of small, nearly white, flowers, with a violet-purple centre, like an amethyst set in frosted silver. It was introduced from Moulmein many years ago, and is still one of the best of the family. *H. Paxtoni* seems to be only a variety of *H. bella*. *H. campanulata* is quite distinct from any species in cultivation; it has thin leaves and branches, and the corolla, instead of being reflexed, as in most species, is



HOYA CUMINGIANA.

THE BELL WAX-FLOWER (*Hoya campanulata*).

quite bell-shaped (whence the name); the flowers are of a delicate cream-color, and produced in umbels, each of which is composed of from ten to fourteen flowers. *Hoya carnosa* is too well known to need description, it being as popular as the stephanotis. It is a valuable plant for placing in corners where nothing else will grow, or for covering bare walls, rafters, &c. *Hoya Cumingiana* is stiff and erect in habit, and forms a bush; its distinctness

is its chief recommendation. All hoyas are of easy culture, and although some require stove heat, it is now perfectly understood that nearly all of them succeed well in an intermediate house where the minimum temperature does not fall in winter below 45°. Great care should, however, be taken to prevent an excess of moisture at the roots, which is always injurious to hoyas.—*Gardening Illustrated*.

CHINESE PRIMROSES.

AS house-plants in winter we have nothing better, brighter, more profuse or satisfactory than these lovely primroses. They come into blossom in November and last till April, but are in their heyday in December, January and February.

KINDS.—That depends on who is your seedsman. The several growers have “strains” named after themselves, and each of which is likely to be “the finest in cultivation.” I have grown most of the prominent strains in the market, and now conclude that I cannot tell the one from the other. Aren’t they named? Oh, yes; they have names enough and long ones enough, too; for instance, *Primula Sinensis fimbriata punctata elegantissima*; still, like Buttercup’s babies, they seem pretty well mixed up. If you get your seeds from a respectable seedsman, get his best white, red, scarlet or rose, as your taste may dictate; the poorest will be good, even if the colors should turn out a little mixed.

COLORS.—I prefer pure white, pale rose, velvet “scarlet” and other brilliant shades, but do not care for the lilac, red-purple, and carmine shades so common in these primroses. As a white, *P. alba magnifica* has afforded me the largest percentage of fine blossoms and *meteor* among brilliant, velvety reds. *Chiswick Red*, received from one firm, gave three-fourths fine flowers; the same variety from another firm has not turned out to be one-third of Chiswick Red. Among the newest varieties I have ordered for next sea-

son are the Queen, white, Chelsea Scarlet, Chelsea Rose and Chelsea Blue. Since the advent of Carter’s Blue some years ago a little progress has been made in deepening the color; still, it is a rather far-fetched blue.

DOUBLE-FLOWERED VARIETIES.—The old double-white is the most useful of all. But we have many newer sorts of various colors, lovely in themselves, but difficult to retain. Seeds of double-flowered varieties are offered for sale and they grow as freely as do those of single ones, but very few of the seedlings will have double flowers. Although double flowers are not so beautiful or brilliant as single ones, still as cut flowers they are far preferable.

PROPAGATING DOUBLE-FLOWERED VARIETIES.—When the old plants have done blooming, say in February, March or April, they probably will have several shoots to the crown. I chop some swamp moss and mix it with as much sand as will stick to it; then make a slight incision at the base of each shoot, and tie some of this sandy moss around the crown. In a few weeks young roots will appear in the moss, then I pull off the several shoots and treat them as individual young plants.

FERN-LEAVED VARIETIES.—The adjective *filicifolia* sounds big and looks well on paper, but certainly among my primroses, either as regards beautiful or massive foliage, the fern-leaved have no advantage over the round-leaved, and when it comes to excellence of blossoms I prefer the varieties that are not fern-leaved.

RAISING YOUNG PLANTS.—I never keep over old plants of single varieties; I raise all of my young plants from seed sown in spring. I sow in March in shallow seed-pans, partly filled with light, sandy earth, and keep these shaded from sunshine, away from drying influence, and in a moderate temperature, say 60°, till they germinate. Some come up in ten days and others in the same pan not for four weeks. But as soon as they appear I transplant them into other pots or pans, as "damp" has no mercy on germinating seedlings.

SPRING TREATMENT.—After the plants have grown enough to touch each other in the pots or pans into which they were transplanted, I pot them off singly into pots 2½ inches in diameter, and next time into 3¼-inch pots, and after that into 4-inch pots. I keep them near the glass all the time, as cool as I can after April and faintly shaded from sunshine.

SUMMER TREATMENT.—I plunge the pots in a cold frame facing the north and sheltered and shaded from the south, keep them covered with sashes in sunny or rainy weather, and uncovered at night or in dull but dry weather by day. The sashes are shaded by whitewash made from lime or white-lead and naphtha, and when on the frames are tilted up all the time and in such a manner as to ventilate fully, and exclude sunshine and wind. Probably they will not need repotting before August. In the afternoon, after sunshine passes off the frame, I give the plants water and sprinkle them all overhead gently.

AUTUMN TREATMENT.—About the end of August

they usually begin to grow vigorously. Repot into five, six or seven inch pots, as they require a shift, but be careful never to repot a plant that is not well rooted, and avoid overpotting. Keep them in frames near the glass. Give them plenty of room. Pick off the few scattering flowers that appear before November.

WINTER CARE.—My plants now (January 7) are at their best. Partly in November and partly in December, I removed them from the frames to a cool, low-roofed greenhouse, where, being near the glass and in cool, airy quarters, they have assumed a very dense, flat form. I have to pluck off the inner leaves to prevent them from choking the bunches of blossoms, and in this way secure a huge bouquet of red or white, margined with green.

SOIL.—Turfy loam, chopped fine, leaf-mold and some well-rotted old manure, but, in fact, primroses will grow well enough in most any free, open, loamy soil enriched by a little well-decayed manure.

WATERING—Is a very important consideration. Overwatering will clog the soil and rot the roots; under-watering will enervate the plants and cause the leaves to turn yellow. The pots should be thoroughly well drained. Water moderately, but never wet the flowers.

FROST.—One point in favor of primroses as house plants, is that a few degrees of frost does not hurt them. They may get darkened and wilted, as a lettuce, with frost, but, if sprinkled overhead with quite cold water, kept cool and shaded from strong light for a day, they soon will recover themselves. WM. FALCONER.

THE PROGRESSIVE CHRYSANTHEMUM.

(Read before the New Jersey State Horticultural Society, December 29, 1885.)

IT is barely possible but hardly probable that any flower will have such popularity in so short a time as the chrysanthemum enjoys to-day. It has added a full month to the floral season, without usurping any individual; this in itself is a guarantee of good faith, for it frequently happens that candidates for position have to suffer through their brushing against some one already installed. So, with no competition, one need not wonder at the immense popularity of autumn's queen.

The chrysanthemum in its primitive form cannot be considered a new plant, as its introduction into botanic gardens dates as far back as 1689, for at this time Sinese, the Chinese form, was sent to Holland under the name of *Matricana Japonica*. The species *Indicum* was introduced in 1699, and these are the parents of the small flowering kinds, which are frequently met with in old-fashioned gardens and popularly known among elderly people as artemisias, with their quaintly-colored button-shaped flowers. I have no hesitation in stating that many of these old varieties were introduced here as early as 1820, together with a few of the early raised Chinese varieties, especially the tall-growing lilac, the changeable yellow, and a few having quilled flowers. It would seem that all of the varieties with quilled flowers have been lost; but of the others, I know where there are quantities; some of

the old gardens on Long Island contain as many as thirty varieties, where they have been for fifty years.

It was left for Robert Fortune to bring us the material for the chrysanthemum's popularity, in seeds, from Japan in 1859. The plants from these seeds were eagerly watched until they flowered, when, with their quaint and fantastic forms, they were severely criticised, as being ragged and without any definite shape, some critics going so far as to say that they would soon be consigned to oblivion; but a few cultivators persevered, and in a short time their plants were admired and purchased. With this the circle grew wider each year until four years ago, when the first great wave of popularity rolled in. The present interest amounts almost to a craze, and high tide has not yet been touched. The love for flowers has not grown for chrysanthemums only, and with the prosperity of the country it will not stop there.

I will lay before you the claims the chrysanthemum has as the flower for the people. It is cheap, appealing to the heart rather than the purse; it thrives under ordinary treatment; it is nearly hardy with slight protection; it flowers at a season when none others are to be had; it remains longer in good condition after being cut than any other flower; it has bright, effective coloring, and its many forms are so varied as to please everybody.

The simplicity of culture for ordinary purposes can be told in a few words.

Small plants can be planted the 20th of April, but any time to the middle of May will be soon enough. Set as far apart as to allow two and a half to three feet for each plant. This can easily be done where a border can be devoted to them alone; when grown in a mixed border where there are other plants, a space of two feet should be allowed for each chrysanthemum. The soil must be made rich with manure, and kept clean. About the first week in June each plant should have the centre of the shoot pinched out—an operation known as “stopping.” A strong stick at the time should be placed by the side of each plant, to which it should be loosely tied. In a few weeks there will be grown from four to six more shoots, four or five inches long. These must again be “stopped,” and this operation continued until the first of August, after which time let every shoot grow and do not stop any more. Keep the plants tied so as to prevent being broken by the wind. By the first week in September many buds will be formed. If very large flowers are desirable, one-third or more of the buds should be taken off. Some weak liquid manure can be given, and about the 1st of October, if the plants are required for decorations in the house or greenhouse, they can be easily dug up, potted into different sized pots, according to the plants, and set in the shade a few days. They must be well watered, after which they can be placed in the sun until there is danger of frost, when they should be moved into a cool room or greenhouse, but not be subjected to fire-heat more than to keep out the frost. This is a simple and very satisfactory course of treatment, and can be carried out successfully by the merest tyro.

For very large specimens and for cultivation in pots more time and attention is required, costing, of course, more to accomplish. Some growers prefer to grow them in pots the whole year. Beginning with the 1st of March, they should be potted, first in three-inch pots using ordinary potting soil; they will require repotting after a few weeks in four-inch pots, the soil having about a fiftieth part of bone-dust added. The next shift should be into six-inch pots, well drained, the soil being rich, turfy loam, with a good sprinkling of bone-dust. They must be kept in cold frames until the 1st of May, and afterward “plunged” outside in an easterly exposure. Keep them carefully watered and give occasional soakings of guano-water (one ounce to three gallons being the proportion), and by the 1st of June pot into their blooming pots, “stopping” and tying “out” as required. From the beginning of July until taken in the house in October, they must be frequently watered—often as many as seven times each day.

HOW TO ENJOY CHRYSANTHEMUMS OUT OF DOORS.—In a good open spot, on rich ground, along in May, plant out as many as may be necessary, not less than two and a half to three feet apart, giving the same treatment as advised in the first part of this paper. There is no better place than a good vegetable garden to plant them, and don't let them lack for nourishment. At any time before the end of September decide on some spot, according to the quantity of plants, where a bed can be planned;

carefully dig up the tallest plants first, placing them in line so there is just room enough for daylight between them, and dividing the number of plants into equal parts so that they may be arranged about four feet deep, with the tallest at the back, the shortest ones in front. Of course all the soil must be kept on, as far as possible, and they must be firmly planted and well watered. Four posts are to be set in the ground, two at each end. Let each post be two feet taller than the plants, this will give you the tallest at the back. Nail an inch board, four to six inches wide, edgewise all around, the edges to be flush with the pitch of the posts. A board should also be nailed on edge around the bottom. If the bed is longer than ten feet, more posts will be required as supports. On the side and at both ends tack a roll of canvas, cloth, muslin or any material that will simply protect them from cutting winds. Cover the top, which will be on a slope with the same material, nailing it at the upper side and attaching it to a roller, so that it can be easily let down and taken up. This should be let down on the approach of the first cold snap, which is generally early in October, and which lasts only one or two nights, and on cold nights and very stormy days afterward the plants should be kept covered. As a matter of course provision will be made to securely tie the canvas in case of high winds, reserving a small opening at the highest point of each end for circulation of air in damp weather. We have not given any dimensions as to size; that can best be determined according to the number of plants. We can, however, say that the experiment will be very satisfactory, that the flowers will be nearly equal to those opened in the greenhouses, and that the canvas cover will be sufficient to keep the plants from being injured by the frost, and will serve the same purpose for many years.

STANDARD OR TREE CHRYSANTHEMUM.—The astonishment created by the standard or tree chrysanthemum at exhibitions has led to many inquiries respecting their management. One of the most popular ideas was that they were three or four years old. This is entirely fallacious, as the chrysanthemum is an herbaceous plant, springing up each year from the surface and flowering in due season, after which the top dies, to be succeeded another spring by a new growth, and so on from year to year. The treatment for standards is as follows: As soon as strong, healthy shoots spring up after the first of January, they are cut off about three inches long and put in sand as with other cuttings, in a cool propagating house where the temperature averages about forty-four degrees. In ten days they are rooted, and are then potted into two and a half inch pots, placed in the greenhouse, kept growing without check of any kind, and repotted from time to time as each pot gets filled with roots, until they reach the sized pots in which they are to flower. This will be about the first of June. They are kept loosely but securely tied to straight stakes, keeping them strictly on one stem until the desired height of the stem is reached, which may be three or six feet; the top is then pinched out. In a few days side-shoots appear; these are trained out in due course to a frame of light sticks, or a wire frame, and are pinched again and again until the first week in August. The shoots are regulated and arranged

so as to have an evenly-balanced head. They are watered whenever they require it, even if it be six times a day or only once in two days. They are placed out of doors by the end of May, sheltered from wind, the pots plunged to the rim, and the ground mulched so as to retain the moisture all around them. Soon after the first of October they are taken into the greenhouse, and treated in a similar manner as the bush forms.

HOW TO OBTAIN VERY LARGE FLOWERS.—Many are desirous of having large flowers, and would be glad to have such as are seen on the exhibition table. With this end in view, time and attention *must* be given, and there must be a sacrifice in quantity. The plants must not be pinched often, consequently there will not be as many shoots, and they will be taller, but not nearly so bushy, some plants of five feet high having eight shoots and not more than twenty flowers on each plant, this being a very liberal number. Where the very largest flowers are to be obtained, only one to each shoot is allowed; every side-shoot and every bud is rubbed or pinched out with thumb and finger, except those selected to remain; the side-shoots are pinched out from time to time and the small flower buds are removed as soon as they are as large as radish seed, which is during the latter part of August and September. The plants are watered with manure water and always well cared for, protected and treated as the standards. It is not to be expected that the chrysanthemum is exempt from insects and other enemies. The worst insect is the black aphides, which is easily removed by fumigating in the house or by sprinkling the entire plant with tobacco dust if out of doors. The white and black thrip are also troublesome, but can be got rid of by tobacco and plenty of water. The greatest friend is the lady-bird beetle and its larvæ, and these should be encouraged at all times, for as soon as ever they can be found and placed on your chrysanthemums, the black-fly will be exterminated in a few days.

The chrysanthemum may lay claim to being a hardy plant if the following conditions are maintained: Where

it is desirable to cut off the tops for the sake of tidiness, they must be covered an inch or two deep with dry leaves, and a few evergreen branches placed over the leaves to keep them in position. In localities where snow is permanent all the winter, there is no better protection than to heap over each plant a mound of four to six inches deep; or the plants after flowering can be removed into a deep, cold pit, or placed snugly beside a fence or wall, to be covered with leaves and evergreen branches until April, when they should be planted in position for the summer growth. Those plants that are placed in pots to flower should be stored in any cold position, such as a cellar or outhouse where some light can be admitted. Those having a cold greenhouse will, of course, take advantage of storing a few plants beneath the benches, and where it is desirable to multiply them cuttings can be put in as they get large enough.

Where the chrysanthemum has made the most progress is in its prolonged season of flowering. Many varieties can now be had in flower by the 1st of September, many late varieties until the middle of December. The shapes of many which only a few years since were confined to one or two colors are now to be found in all colors. The colors especially of the deeper shades of crimson, maroon and amaranth have become more pronounced and numerous; the habits of the plants have become more compact and bushy. As to the advance in size of flowers it is even more remarkable. Another part of the progress is in some distinctly new characters with tubular-lobed and peculiar shaped petals.

It would seem that societies for exhibiting chrysanthemums could be gotten up in cities of 6,000 or more inhabitants, which would be interesting and instructive, coming as it would at a season when time could be spared, and with judicious management it could be made a financial success.

At the late exhibitions of New York and Philadelphia some of the largest and best flowers exhibited were shown by an amateur, and he from Woodbridge, N. J.

JOHN THORPE.

WHAT CAN BE FOUND IN THE WINTER WOODS.

WHY is it that certain plants seem brighter and fresher after the thermometer indicates that all the moisture on the surface of the earth and several feet below is turned into frost and ice? The extreme cold, that takes all life from delicate plants, seems to be an elixir for them.

A walk through the woods in the winter will naturally suggest this question to everyone who is intent on learning the cause which produces the effect, and who always desires to know the reason why, and will not be content with the answer, "Oh, they are hardy, and can bear the frost."

The tissues of "hardy plants" are probably of a strong leathery texture, the cells of which contain a great quantity of assimilated matter and only a small quantity of water. This would give them strong powers of resist-

ance against the cold of winter and frequent rapid thawing, as it has been proved that loss of plant-life is caused principally by the mode in which thawing takes place and not by freezing.

What can we find to interest us, now that the flowers have all left us, the grass grown brown and sere, and when on every side that general appearance of winter rest greets us?

The casual observer will say: "A few evergreens, perhaps, not much more;" but to the interested and observant person there will be much that is beautiful, and the species of plants and shrubs found that are still attractive, either by foliage or fruit, will be many.

I collected during the month of December—and what could be found then can be found in any winter month—twenty species, three varieties and several lovely mosses

not included in these, and this collection was by no means exhaustive, even in our cold New England.

The plants, whose foliage was fresh and bright, were: *Chimaphila umbellata*, prince's pine; *Chimaphila maculata*, spotted wintergreen; *Coptis trifolia*, gold-thread; *Sarracenia purpurea*, pitcher-plant; the *Lycopodiums*, or club-mosses, *L. complanatum*, *L. lucidulum*, *L. clavatum*, and *L. dendroideum* with its variety *obscurum*; *Aspidium acrostichoides*, Christmas fern; *Polypodium vulgare*, rock fern, and varieties *obliquum* and *dissectum* of *Botrychium lunarioides*.

The shrubs and plants gathered for their fruit were: *Ilex verticillata*, black alder; *Celastrus scandens*, bitter-sweet; *Berberis vulgaris*, barberry; *Ligustrum vulgare*, privet; *Rhamnus catharticus*, buckthorn; *Hammamelis Virginica*, witch-hazel, this for the bright, interesting calyx and old seed vessels, and *Smilax herbacea*.

Those which had both fruit and foliage were: *Arctostaphylos Uva-ursi*, bearberry; *Gaultheria procumbens*, checkerberry, and *Mitchella repens*, partridge berry, this for beauty leading all the rest.

The plants that I have mentioned are so well known they seem to need no special description, and are, moreover, generally so abundant, excepting *Chimaphila maculata*, which I should call comparatively rare, that it seems to be no harm to gather enough to enliven our parlors with a bit of wildness during the winter. But to last the winter through, they must not want for water, either for the stems or leaves, and should be showered frequently.

If you will give a little thought to the matter, you will find several plants, dependent, of course, upon your locality, which can be forced to blossom in the house during the winter.

The flower-buds of the *Cassandra calyculata*, leather-leaf, are formed during the summer, so if you wish for very early blossoms, gather some of it in the first month of the winter, put it in warm water and place in a sunny window; in three weeks the flower-buds will begin to open, and in a month they will be fully out. I gathered some on the 10th of last December; on the 28th five bells were open, and on the 8th of January I had a fine show of blossoms.

The *Hepatica triloba*, that charming flower of early spring, will blossom in the house and give pleasure for a long time. Last year my hepatica, taken from the woods in the autumn, was well blossomed on the 10th of January and continued in flower for two months, the last petals falling on the 10th of March when the new leaves were beginning to appear.

As I was looking at my treasures from the woods a few days ago, I found what was a surprise. The *Coptis trifolia*, whose golden roots filled a small glass vase, had upon it a flower-bud, and on New Year's Day it was fully out. Pretty, little bright star! but ephemeral, here to-day and to-morrow gone, so if not carefully watched you miss the flowers in their season. The first I ever saw in bloom were upon a plant that I had in a flower-pot where I could watch it from day to day, for I had always been too early, or too late, for the "opening day."

Epigaea repens—trailing arbutus—of all spring flowers

none more welcome or well known—the mayflower of my early days—might be induced to favor us with its sweet spicy flowers in the winter; but as it does not grow in my vicinity I have not experimented with it, and I only write of my actual experiences.

The mosses—what can I say that will adequately describe their loveliness?

"Deft secreter of the mast
Holding in thy meshes fast,
Russet burr and berry bright
Filmy seed new winged for flight;
Whatsoe'er the squirrels toss
As the swinging boughs they cross,
Or the birds in greedy haste
From their beaks let go to waste;
Plant of cool and patient mood,
'Mong the changelings of the wood."

Ruskin says, "No words that I know of will say what these mosses are; none are delicate enough, none perfect enough, none rich enough. The woods, the blossoms, the gift-bearing grasses, have done their parts for a time; but these do service forever. Yet, as in one sense the humblest, in another they are the most honored of the earth's children; unfading as motionless, the warm summer frets them not, and the autumn wastes not. Strong in loneliness, they neither blench in heat nor pine in frost."

There are at least half a dozen mosses that almost anyone can determine by giving a little attention.

Climacium Americanum, the tree moss, grows so much like a tree, the fruit stems ascending from the centre of the plant, one can hardly mistake it. It is, however, rare to find it fruited. I found it in fruit for the first time the 16th of last December on a rocky hill-side, but it was not then at its best. Judging from its appearance, I should expect to find it perfected by the middle of November.

The *Hypnum*s are very attractive, but difficult to determine, with a few exceptions.

Hypnum crista-castrensis, which unrolls at the end in a frond-like manner, and which I call "fern moss" for a common name, adorns small rocks with its beauty and can be found in all its freshness in the pine woods where it is slightly hilly. The color is yellowish-green. The leaves of *Hypnum tamariscinum* are fringed on the margin, hence I have named it "feather moss." It is abundant on the ground rocks and old logs near swamps.

Hypnum complanatum, mat moss, has leaves on a bright, shining green, which are crowded, and the single plant is pointed at the end. It roots profusely, and is found in dry woods, in thin close mats on stones and roots of trees.

Polytrichum commune, or pigeon-wheat moss, is, perhaps, the most common moss found in the woods. It is tall and showy, from six to twelve inches high. The fruited head, when open, nods and resembles somewhat a small pipe. It is said that Linnæus found this moss very abundant in Lapland and often used it for couch and pillow.

The pretty tufts of moss, with globular-shaped fruit, which you will find on rocky hills whose sides are kept

moist by trickling water, belong to the genus *Bartramia*, specific name probably *fontana*. The name was given by Linnæus in honor of John Bartram, a Pennsylvania farmer, said to have been, in 1750, the greatest natural botanist then living.

Besides the ones mentioned, there are some others easily determined, notably *Dicranum scoparium* and *Atrichum angustatum*.

To me there is a great charm in experimenting with plants, and, as I succeed in producing some interesting results, I feel well repaid for time and labor spent. If you let the earth in a flower-pot remain undisturbed for years, you will often be surprised by some new plant—fern, moss or liverwort—and it may be some sleepy seed of a phænogamous plant will wake up and want to send a herald forth to interview the light of day. I have a flower-pot which, more than twelve years ago, was filled with the blue-green lycopodium, *Lycopodium cæsum*, and *Aspidium Thelypteris*, marsh fern, and has remained undisturbed since that time, excepting the taking out of some of the lycopodium for friends, no repotting and no replenishing of earth.

The *Thelypteris* grows more abundant each year, being very beautiful last summer, and now the new fronds are just showing themselves. *Pteris serrulata* sent its spores to the earth in some way, and several plants of that fern are growing with the *Thelypteris*, also *Adiantum cune-*

tum, and at one side of the pot there are three leaves of what may be a flowering plant, but the kind is as yet unknown. In other pots which have been undisturbed for years, ferns have been developed from spores that must have been for a long time dormant in the earth, or wafted in the air from dried specimens which might possibly have been once or twice in the room.

You will find that two or three experimental pots of earth are always very interesting.

All other books pale before the ever-varying book of nature. There is no end to the entertainment, if you look no higher than this, that is afforded without money and without price to any who have a little leisure. Without price? Perhaps not, for whatever is of real worth must be paid for in some way, and to reap a good harvest from nature you must sow earnest seeking, well mixed with enthusiasm, and then you will be repaid a hundredfold.

LOUISE DUDLEY.

NOTE, January 11.—The little flower on the gold-thread is as bright and fresh this morning as when first open more than a week ago, and the petals refuse to be shaken off.

The air of a winter parlor not overheated and the cool water, which give sustenance to the plant, seem to act as preservative agents, for anyone who knows the plant knows how quickly the petals of the flower fall when blossoming in its own home.

L. D.

THE WHITE DAFFODIL.

CHAPTER II.—CONTINUED.

BUT a year flew by, and yet another, and no news of Eric; once only they heard that the ship reached port safely, and that Cedric's brother was yet alive and that all was well, and then the months had flown, but no news had come. And every morning the Abbot prayed as he looked out seaward from the old tower.

And all the while Ealdar came to woo the Black Hawk's daughter, and Cedric had refused the office of the holy church, and threatened his worst if her father should force her marriage with the old man against her will.

"The boy is dead," said the Black Hawk; "indeed, report spake truly when it said he had taken to wife a fair Andalusian; he will return no more. and Ealdar, is he not rich, and hath much love for thee? and, by my troth, at the holy place shalt thou wed with him before Christmas again," he said. "Nay, father," she had replied, "such haste were unholy; indeed, it may not be," but he had refused to hear and had driven her from him and bade her serving-maids prepare for the wedding. Just then, too, a sail came in sight on the sea below, and the Black Hawk grew pale with rage; "he trembled with fear the rather," as Ulrica had said, "lest Eric should have come."

Then, late on the night of the marriage, Black Hawk had sent for his daughter's maids and bade them attire her anew, and bid her to come into the great hall where the revels were to bear the wassail bowl before Ealdar, to do service to her liege lord before all. Poor child, of what avail were her sobs; of what use, now that she was a

bride, to murmur Eric's name and to weep on his hound's neck as if her heart would break? Ah, these were "good old times," truly, when even high-born maidens were but slaves; when their fathers might, with the aid of a strange mendicant friar, wed them to whomsoever they would! What could tears or cries avail within thick stone walls? Ha, ha!" laughed the Black Hawk, "she is but young and foolish, but she will love thee, Ealdar. Ha, ha! to thy health, Eric," he laughed, as he quaffed from the great bowl before him, and, drunken as he was, his eyes sought the door, for the very sound of the lad's name on his own lips sank deep into his heart like a knell.

But Eric was not here, he was still in Spain fighting against the Moors, for had they not entered the monastery and stolen the silver vessels and the jeweled cross from the high altar.

But there was a pause in the revels, and the serving-maids trembled as they stood before their drunken lord and told him his daughter begged of him to excuse her service. "Ho, ho!" said he, with a curse; "by the holy one, Woden, but she shall come! Ho, Ulric! follow me to her chamber; but Ulric scorned to follow. And the knight passed through the halls and up the stair and so to his daughter's place. Drunken though he was, his face blanched white as old Ulrica stayed him at the threshold. Her black hair was disheveled and her eyes shone in the gloom like those of a wounded tigress as she stood erect, immovable, before him. "Oh, thou accursed one! and

thou wouldst slay her child also," she said. Wild with rage he flung her aside and scattered the afrighted maids as he entered the chamber. "Ho, ho! So thou wouldst not come?" and he glared upon his child and shook her as a leaf in his blind madness; "and thy wedding gear yet upon thee. Thou shalt come to Ealdar, thy husband, in all honor." Poor child, she felt not, saw not; a whirl of ideas passed over her; was it a nightmare, a horrid dream this, and she a wife? Cedric had failed her; Eric not here; was this demon her father? and with a shriek she fell from him to the floor like a limp and lifeless thing.

He stooped to raise her—but what was that like the roar of summer thunder in distant rain-clouds? Was that howl which filled the air the echo of the death-shriek of his child? What was that dark bounding mass of life that rushed upon him like a phantom in the gloom? How the fiery eyeballs glared, and how the monster's hot breath scorched him. Then, what was this burning at the throat—had Jötun grasped his quivering flesh in his red-hot pincers? He never knew. Drunken, mad with rage, he had gone to his judgment. It was the sleuth-hound, Hela. She had killed him; for once long ago, when Hela had her first puppies, Eric came not home to feed her, and she was so hungry that she left her sleek little cubs and went to the kitchen, and Ursa, the cook, had given her a bone. On the stairs the Black Hawk had met her, and he struck her bone from her teeth as he passed. Poor Hela! She had never wronged him, yet how savagely he had stricken the poor dumb brute because she was Eric's hound, and she yelled with pain and went hungry to her young ones up in Eric's own room. Little thought the Black Hawk that by that blow was his doom this day to be sealed, for Hela had remembered. And the Black Hawk had company along the dark way, for old Ulrica, mad with rage also, had met Ealdar in the great hall below as he, hearing the tumult, came in quest of his friend. "Thou cursed old fox!" she had said. "May not the lamb rest for thee; she loveth thee not, thou inhuman one." "Ah!" said he, "thou mayest tell Eric how well I loved her." But he said no more. Just then a serving-man passed with a falchion in his belt, and in a twinkling Ulrica had wrested it from him. A moment later she had plunged it into Ealdar's side. Thrice she struck him, and laughed like a demon as she held aloft the bloody steel in the torches' glare, and all were aghast who beheld. "Ho! Ho!" she shrieked, "shall it not be written how that a wolf and a hound kept Eric's bride for him;" and again her laughter rang out through the great hall. Then she flung the falchion at his face as he lay, for none, not even his own, had dared to raise him, and departed, for none there durst stay her; and Ulrica was seen at the gate no more.

CHAPTER III.

There was a great commotion in the old abbey on that night of the secret bridal, for one rushed in from the castle bearing the news of Black Hawk's death by the hound and how that old Ulrica had slain Ealdar. Some said that it was Ulrica herself who fled thither for sanctuary, that it

was she who bore the tale; but this could not have been, for are not all legends true? and the legend hath it that on that fatal night the evil one claimed her as his own. Whoever told the tale, there was much consternation among the monks, for had not their good Cedric been defied in the matter, and lo! even a dog had fought in their cause. So Elfric came to the good father and told him all. "So, so," said the Abbot, "by our faith, has not the evil one his own, Elfric? And you have rewarded those who bore the news?"

"She hath sanctuary."

"'Tis well. Now take a trusty man or two and go thou to the castle, for thy council will be needed, and do thou cheer that dove with the blue eyes. We have been asleep," he added, "but let us now amend our ways."

And then the chapel bell was tolled and prayers were said for the living and masses for the dead, and 'twas late when the good Abbot slept.

When the first streak of gray dawn rose above the sea-line Cedric awoke, and he walked barefoot to the chapel, where prayers were being said, and the lights burned dim and faint as the morning dawned, and there they said masses for the dead ones without. When the good Father returned to his own place the sun had risen and shone o'er the glistening sea, and as he gazed outward his eye was less clear than usual and his lips trembled as though he prayed; and as he gazed on, behold, a little bird came, and perched on the thorn-tree and its music filled the air all about as with a psalm, and Cedric's heart stood still to hear, for he knew now that it was the angel-bird; and even as he listened to the melody he wondered how he could have so soon forgotten the little messenger, the same which had brought him thought and comfort in days ago. But there it was, the same beautiful creature with the glossy wings and the slender beak of gold; it sang on there in the morning sunshine, and as the learned monk listened to the little singer he humbled himself, and then quite slowly and clearly the song of the bird was revealed to him. It was a pæan of gladness, the chant of a heart that was pure, of a life that was a life of liberty, free as the winds of heaven, and it sang to the Abbot of "Peace on earth and of good will to all men," for this was the natal morn, and had not the good monks already said the Christ's mass in their chapel beautiful? And this bird-music came as a balm to the Father's heart, for was it not music that was sacred, also?

But the bird-melody died away like a beautiful dream and the Abbot awoke from his reverie, for his eye followed the bird as it fluttered from the thorn-tree, and glanced among the holly bushes and disappeared where the great beeches were beyond the abbey walls; and behold! a white sail gleamed on the blue sea below. Berta, who had prepared a great venison-pasty for the Abbot's breakfast, bade Simon bring up also a silver flagon of the best wine, for was this not a great holiday morn, and Cedric's henchmen, did not they all give him their service and their love, as though he were their father in truth as well as in name? He, good man, could not eat a morsel; true he did take a chalice of wine, but how could he eat? "Nay," quoth he, "our Eric comes to-day, and this night shall there be such a feast within our walls that the very

stones shall tell the tale to those who come after us in all time!" For had not the bird brought to him the message? had it not told him in its matin song, "Behold! behold! thy son cometh, so shalt thou make merry and be glad as for a bridegroom!" Then one ran back from the ship and told that truly Eric had come. And on the topmost towers the clarions rang out clear and shrill, and the woods and downs echoed with the news. And from all the forest country the people came, and they brought in the yule logs, and all that day the serving men swarmed around Berta as he cooked at the great fire, and Simon puffed up and down the stone steps of the vast old cellars busy with his flagons, and so also did the sturdy men who bore them, and they sent down the Abbot's milk-white palfrey for Eric, with a saddle of ox-hide and clothes of yellow deerskin richly embroidered, with gold trappings and bedight with rare gems. "Give all honor to the lad," the Abbot had said, as they started to meet him. "And do thou, Gilbert, go straight; bring Adela hither—tell her he comes." And so her maids put on her the richest attire of embroidered work and fair yellow kid-skin, all worked with gold, and her lustrous hair, was it not all wreathed with pearls and amethysts? And those who had longest known her most wondered at her marvelous beauty, and yet withal was she pale and sad. For what a horrid dream had been that of the night before! She had felt as one on the very edge of a precipice—as one falling over, indeed—and even now could scarcely believe she had not been dashed to pieces in the fall. But she had gone on her favorite palfrey and the Abbot had given her welcome and his blessing. "My child, he comes," he had said, barely said, when Eric himself came and bent his knee before the Abbot for his benediction, which he gave with tears of joy. "Is my brother yet alive?" he asked. "I am here, Cedric!" said an aged man in monkish garb, "come to my rest with you." Then Cedric and his brother passed out together, and Eric and Adela were alone. They did not speak, but from their hearts silent gratitude rose as incense to highest Heaven. And the Father Abbot bade them ring the great bell of the abbey so that all might come in; and then in great pomp and state were prayers said and sung in thanksgiving for a pilgrim's safe return, and Eric and Adela were joined together by the rites of the holy church in that beautiful place wherein they had played. "Why is my bride so pale?" he said to her after the ceremony; "you are like—like that pale flower in the Abbot's psalter," and she smiled upon him.

"But why is not our father here to-day?" for they had not yet told him. But just then the Abbot came and told them all, and privately brought them to the place of sanctuary. It was a large cell in which many a poor slave had found shelter from oppression, and food and kindness also of the rude kind then common; and here were Ulrica and—and the hound; Hela lay in a warm basket with her puppies crawling around her sleek sides. The dog first knew Eric, and she bounded upon him and fairly smothered his face and hands with her affectionate caresses. What a meeting it was, this of a faithful hound and her long lost but not forgotten master. How her soft brown eyes gleamed with happiness, for a dog's love need-

eth not words to find its way to one's heart. And Ulrica, poor Ulrica! was she not human and so felt like a guilty, worthless thing? Eric was here safe and sound—was not that enough?—so said the Abbot, but she spoke not at first, and had forgotten that Eric had been away. "Now, children," she said to them, "go and play in the abbey to-day. Hela cannot leave her puppies, but go you both and go not by the pools." "Come, my children, come," said the Abbot, and then as he closed the door he added, "Poor, poor Ulrica! they say she is a witch—one possessed of a devil—but it is not so; her reason hath left her—she is mad!"

And as the Father Abbot had said, there was that night much feasting, and in the refectory great oaken tables were laden with cooked meats; the boar's head was there and smoking haunches of the great fat deer; and Berta, the cook, had made many pasties of game-birds and venison. And all were welcome, from the noblest and fairest in all that forest country down to the poorest swineherd; none were sent empty away, and there was minstrelsy and dancing also, and for many days afterward the poor were fed in the great hall off that which remained of the feast; and no man, not even the oldest, remembered such a right royal feast-time as was that which Cedric the Abbot made when Eric returned to his own. And those who came in the ship told of the many brave things which Eric had done in Spain; how that he had driven back the Moors and had slain many; how that he rescued from them a noble Andalusian's daughter as they carried her away, and had saved the life of Cedric's brother and of Antonio, the monk who made the beautiful missals, and how he had saved their chronicles and many rare manuscripts also, and had recovered the richly jeweled cross that the Moors had stolen from the holy place; and all these Cedric's brother had brought to St. Offa. And this and much more, was it not writ by Gilbert in the parchment chronicles of the old abbey, and may not the records be seen to this day?

But, brave as the White Knight's son had been, he was thoughtful also, and for Adela had he not brought many rich and rare gifts? A golden tiara and rare jewels, and a cloak of soft, yellow kid-skin, richly embroidered in purple, with deep ruby border, worked by Moorish women who were cunning with the needle. And Antonio, to whom Eric had spoken in praise of the illumined psalter, had in gratitude made him one for Adela, and the cover of it was pure gold. And he had also shown him the place where the beautiful White Daffodil grew high up on the sunny hills of Spain, for with all his success Eric forgot not this, the least of his promises to the fair-haired child-wife with whom he had played in the Abbot's garden. And Adela, the little witch, she who found the pictured book in the stall, had been a little prophetess also, for they were now very happy, they two, and had a sunny garden, and in Lententide there was one flower there ever sacred in its pale loveliness, and their children whispered to each other as they played among the spring blossoms that it was the "White Daffodil" which their father, Eric the Knight, had brought out of Spain.

F. W. BURBIDGE.

COMPENSATIONS.

"HOW beautiful this oleander tree is looking. How many blooms? One, two, three—why, Mrs. Forrest, there are twelve of these lovely pink blossoms! What a faculty you have for making plants and flowers of all kinds grow, bud and bloom, in-doors and out."

"My dear friend, the 'faculty' is no secret; a plain, daylight fact, open to everyone who will notice and give heed."

"But it takes lots of your time—it must—planting, potting, repotting, watering, changing, dusting and the general fussing. Besides, the litter and dirt even a few house-plants make. I know they look pretty, pleasing to the eye, but, aside from that, where's your pay?"

"Where is my pay?" and the woolen blouse Mrs. Forrest was making for one of her children dropped upon her lap.

"I think, Mrs. Miller, I have noticed in your house many articles of handsome design and fine work done by yourself, which serve neither as food nor raiment, yet they are there in every room, filling their particular niche; how do *they* pay you?"

"Why—why, in the doing, to be sure, and the pleasure of possessing."

"Yesterday you could not attend the ladies' sewing meeting, because you were so interested in George Eliot's 'Romola,' that it must be finished before returning it to the library to-day. How did the reading of that book pay you?"

"Pay me? Oh, Mrs. Forrest, if you were not looking so perfectly rational I should say your mind was unsettled."

"Then you found compensation?"

"Yes, indeed!"

"What way?"

"Oh, I cannot tell that unless you have read the book. If you have, you will understand the kind and amount."

"But I have never even seen it."

"Then I cannot tell you."

"Ah! Then, to understand, one must know of the doctrine? It is the same with the cultivation of flowers; and yet, I think, I *can* tell some of the compensations, for there are many. First, they have grown beneath my fostering care, consequently their cheery leaves and smiling blossoms are a satisfaction, and genuine satisfaction in almost any enterprise generally pays.

"But it takes so much time."

"True, and I am not sure it could be better spent, for I have only begun the chapter of recompenses. Besides, in my own experience, I think fancy-work takes time."

Mrs. Miller smiled, while Mrs. Forrest continued:

"Second, by studying the names and characteristics of my floral friends, I find the circle of my knowledge enlarges. Many plants are natives of other countries and their history oftentimes leads to the history, or a portion of it, of the country, and such knowledge many times tends to interesting conversations with friends acquainted

with the same subjects. Oh, the avenues a love and knowledge of flowers open cannot easily be told! But to continue: There is the compensation of giving. A beautiful wreath or bouquet of flowers is an appropriate and pleasing gift on almost every occasion, and, to the truly appreciative, the pleasure of giving is greater than that of receiving. Almost everyone likes to handle and receive flowers. I remember a very little girl walked through my garden once when many flowers were in bloom. A more delighted child I never saw. With a shout of joy she exclaimed: 'The roses, the roses! oh, *see* the roses!' 'Roses' was to her the all-comprehensive name. I gave her a nice bunch, and I think I never beheld the face of a child lighted with greater happiness. That little girl possessed, in a large degree, the natural love of the truly beautiful, and this leads me to the closing portion of my text for this time—the cultivation of the beautiful."

"But, Mrs. Forrest, you are not an æsthetic. I never saw you with a sunflower in your belt, or a lily-pad at your throat."

"Oh, no. Not an æsthetic in the least. I believe the verdict of my acquaintances would be, a plain, home-spun woman. Nevertheless, one of the greatest attractions to me, in the cultivation of flowers, is a growing love for the beautiful, in myself and family. There is a natural refining influence in flowers that long contact will cause to react in some measure. Of course natures differ, but the Yankee instinct, 'Will it pay,' arises in almost every phase of life, and when I see my boys growing daily more fond of 'mother's plants,' missing this one if removed, watching that one closely if beginning to droop, noticing the unfolding buds, eagerly waiting the blooming, singling out the choice plants, and understanding why choice, noting their habits, studying their history, I know a taste for the beautiful is being formed which, if nurtured and cultivated, will ultimately lead to refinement of character, and I am convinced my time is well spent, and my amateur gardening a paying investment."

"A college student once told me it was interesting to notice the difference in effect between a vase of flowers and a spittoon of cigar-stumps upon those who visited his room. The influence of these objects was, of course, silent, but he assured me it was there, and noticeable."

"Well, Mrs. Forrest, you've made a good argument," as my husband would say, "and I must leave you now; but if you will please give me some slips from your plants, I believe, on your recommendation, I'll try the compensations."

"There are many facts connected with their habits, you must know, and the diligent seeker will be rewarded, I do assure you. 'To him that hath shall be given,' you know, are the words of Scripture, and in the doing is the reward, and the striving, rest. Think not too much of the recompense of the future; remember there are solid compensations to be seized each passing hour."

L. EUGENIE ELDRIDGE.

HOME DECORATIONS.

Fire-Screens.

THOUGH screens are convenient for shielding one from the heat of a fire when it proves too warm, they also, as a general thing, shut away its pretty flash and glow, which everyone loves to see, for who does not enjoy an open fire?

The glass screens, therefore, give one the pleasure of the firelight and still protect from the heat when necessary.

The frame can be as elaborate and elegant as one pleases, or simple and inexpensive with a sheet or pane of glass; the better the quality, of course, the prettier the effect.

The one which suggested this description, however, was a double glass, between which sprays of pressed ferns were arranged as if growing from the base. A touch of mucilage here and there on the backs of the leaves will hold them in place on the glass.

It is the safest plan to have the frame made by a carpenter, as it should be strong in order to support the weight of the glass. Very pretty and inexpensive ones can be purchased and the glass cut to fit.

Still another pretty screen can be made and decorated with pressed ferns, by using for the background light-green or gold-colored satin or silk. This must be stretched tightly over the movable frame, with which all screens are furnished for this purpose, and tacked securely all around the edge.

The pressed ferns are then arranged upon the satin as one may wish, using a variety grouped together or those of only one kind. They must be held in position with a touch of gum-arabic or mucilage on the back of each leaf, used very carefully, that the satin may not be marred by it. Over this, to keep the ferns from breaking, is stretched, very smoothly, tarlatan or silk grenadine the color of the background. Through this they can be seen almost as plainly as if it were not

over them. The back of the screen is then covered with silk of the same shade, or some pretty, contrasting color, and a braid is tacked round the edge to finish it.

Both methods of arranging the ferns will be found extremely pretty, but the glass screen is particularly pleasing.

M. E. WHITTEMORE.

Work-Bag.

THE diamond-shaped sides of this bag are made of stiff pasteboard, and this renders it much more substantial. You first make a plain bag of silk or satin,

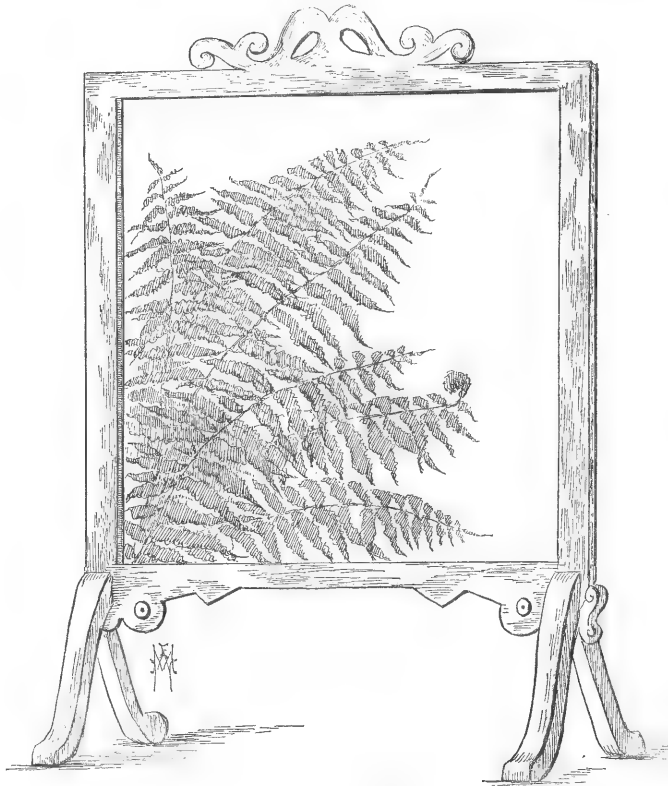
with a double shirr string of satin ribbon in the top, and a bow of the same ribbon on the front and on one handle. Then cut two diamond-shaped pieces of pasteboard for the sides, which should be just the width of the bag; cover each with plush after having embroidered the piece intended for the front. We suggest a branch of oak-leaves, as it is not a common pattern, and can be made very effective by working the leaves in shades of green, brown and red, as nature tints them in the fall, and wherever there are acorns in the pattern use the natural ones in this way—slip the nut out carefully, and sew the cup on by running the needle through the centre;

then glue the nut in place. Light brown is a very pretty color to use for these bags, and will look the best with the oak design. Still, it is entirely a matter of taste, as all colors are used.

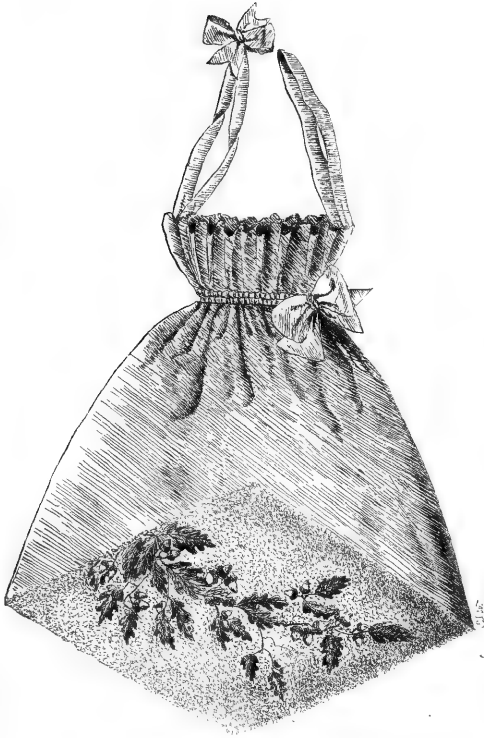
E. S. W.

Dinner Souvenirs.

WHEN a dinner-party is given, the hostess usually takes great pride in having the table laid as prettily as possible. For a trifling sum one can add a very novel and artistic ornament to the table. To hold the napkin of each guest use a wooden clothes-pin. Paint each one a pretty, delicate shade, and on each



FIRE-SCREEN.



WORK-BAG.

side design a tiny cluster of flowers, or, if you prefer, have a little motto written suitable to the occasion. If your taste suggests gilding, do so, for you will find it will look quite effective. At the top of each pin tie a full satin bow of narrow ribbon, as it gives a lovely finish to each. A few natural buds might be caught in them, which would make the little "souvenirs" seem more attractive. They are very pretty mementoes to present to the parting guest.

KITTY CLOVER.

Fancy Apron.

THE apron represented by our illustration is made of a new material called "Persian Dimity" which has a very fine and sheer appearance, much different from the old-fashioned dimity, and is very nice to embroider. It comes at twenty-eight cents a yard, and one yard will make an apron. The design selected is one in which all the latest shades can be used—shades of orange, yellow, and olive-green.

Make a hem an inch wide on the sides of the apron and across the top; the bottom hem should be three inches wide, and should be done neatly by hand.

The design should be stamped on, lightly traced, or one of the Briggs transfer patterns can be used, and is worked in outline stitch with embroidery silk. Two shades of yellow ribbon are used for the bow at the side; run a piece through the top hem and shirr it up on the ribbon and sew it here and there with invisible stitches to keep it in place. The ribbon is fastened around the waist with a hook-and-eye underneath the bow. For one

who is wearing second mourning, the "heartsease" is an appropriate pattern, and should be worked in shades of purple or lavender, with the bow of two shades of the same color.

These fancy or art aprons, as they are termed, not only brighten up dark winter dresses, but save them from much dust which will cling to muslin.

E. S. WELCH.

Shawl Crocheted in Star Stitch.

NEARLY one pound of cream-white Shetland worsted will be required.

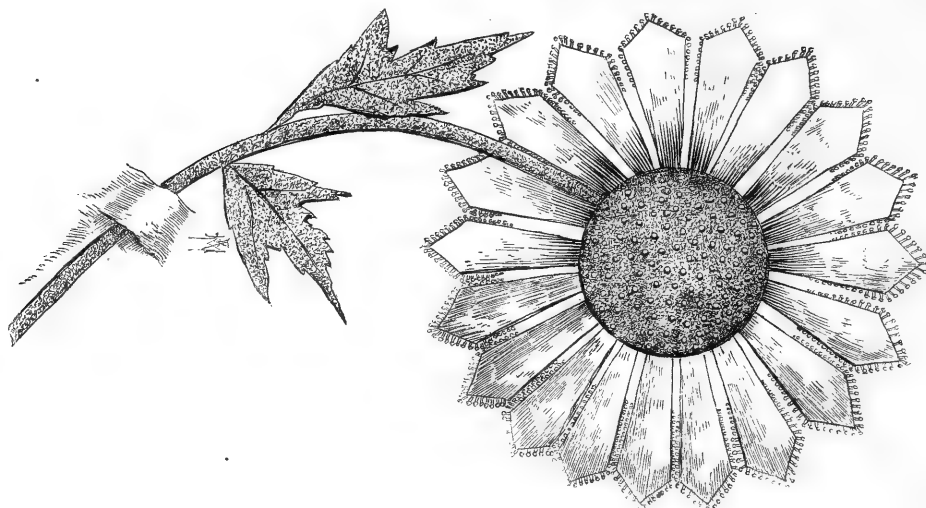
Make the chain for the centre as long as you wish the square. From one yard to a yard and a quarter will be plenty large, as the border is a quarter of a yard in depth.

The centre square is worked in star stitch. After making the chain as directed, take up the stitch nearest the hook and draw the yarn through. Take up and draw the yarn through the next four stitches in the same manner. You now have six stitches on your hook; draw the yarn through these and chain one to close the first star. Take up and draw the yarn through the loop of the stitch that binds the stitches of the first star, also the last stitch of that star, the loop of the chain in which the last stitch was taken, and the next two of the foundation chain, so that you have six stitches again on the hook; draw the yarn through these and chain one to complete the star. Proceed as with the second star to the end of the chain.

In star stitch there is a right and wrong side to the work, therefore break the yarn and commence the second row at the first star. Make a stitch in the first one on top of this star, chain three and take up the loops, also the long stitch of the star, and the short one that binds it, and you have six stitches; draw the yarn through these



FANCY APRON.



SUNFLOWER PINCUSHION.

as before and chain one. Make the other stars of this row in the same manner as the second star of the first row. Repeat these rows until the centre is large enough. When the centre square is completed make a row of open work around it, by crocheting two double crochet stitches, chain three and then two more double crochet stitches, leaving about the space of three stars between. Proceed in this way around the shawl, and weave in the openings a cream-white satin ribbon, after the border has been worked.

For the first row in the border make a shell of six double crochet stitches between the two double ones in the row just finished, and one double crochet in each space. Have one of these shells come on each corner of the square. Make three rows in this manner, then two rows of eight double crochet stitches, placing in every case a double crochet between each shell, and working it in the top of the one in the preceding row. Work two rows of ten double stitches and two more of twelve. For the thirteenth, which is the last row in the border, make a full scallop and finish the edge by making a half stitch and two chain, and putting them between every two stitches in the scallop.

MRS. C. C. W.

A Sunflower Pincushion.

THESE odd little cushions are perhaps more for ornament than use, although, if securely fastened to the side of a toilet-table, they can be made to serve very nicely in place of the ordinary cushion.

The petals are of yellow satin, the calyx and stem of dark-brown velvet, and the leaves of green velvet.

For the centre, or foundation of the flower, cut two circles of thin cardboard; two and a half inches in diameter is a good size, although they can be made larger or smaller, if desired. The circle for the upper side should be covered, first with a layer of wadding. The velvet must be drawn over this and caught down on the under side. The piece for the under part is covered plainly, and the two circles are then overhanded together with brown silk.

The stem is made of a narrow steel, like those which are sometimes used in dress waists, but a pliable one should be selected. This also must be covered with a narrow strip of brown velvet, which is drawn tightly around it and overhanded the length of the stem and neatly finished at each end. Turn over one end about half an inch and sew the flattened part to the underside of the circles, so placing it that the stem shall come directly from the centre.

Cut four leaves of the cardboard, shaped like the small green leaves of the sunflower; cover each one with green velvet, and overhand each pair together with green silk. These are to be sewed to the stem about half-way down from the flower, one a little below the other, and should be bent back or outward from it.

The petals are also of cardboard, and a sufficient number must be cut to fit round the circle, nearly touching each other. Two pieces, of course, are required for every petal, each covered with satin and overhanded together with sewing silk of the same shade. The base of each petal is square, and this part is sewed to the velvet circle, placing the petals so that they nearly touch each other.

The pins are stuck round the edge of the petals, allowing the heads to slightly project beyond the edge, and they are also dotted over the middle of the flower.

The cushions are exceedingly pretty, and, looked at from a short distance, seem like veritable sunflowers as they nod their heads upon their pliable stems.

M. E. WHITEMORE.

ONE of the most approved methods for making transparent tracing paper is the following: Dissolve a piece of white beeswax about the size of a walnut in half a pint of spirits of turpentine. Then, having procured some fine white tissue-paper suitable for the purpose, lay it on a clean board, and with a soft brush dipped in this liquid apply it to both sides of the paper. Hang it up in a warm place to dry and it will be ready for use in a few days.

NEW YORK FASHIONS.

LAST month we endeavored to give our fair readers some particular information about the making of cloth dresses. This month we will not be quite so explicit, but will give some general ideas about making over or re-making partly-worn dresses—a part of the duty of almost every American woman, unless she is the possessor of a large private income, or is of that rare temperament that likes her old clothes best, and, when a dress suits her, prefers to keep it as it is until it is worn out. There *are* such women, but they are few and far between.

Suppose, then, that our friend has a black silk or satin dress that has been worn one or two seasons. It is easy to remodel it, by buying from three to three and a half yards of velvet brocade, and using that for the front and side breadths, which must be of just the shape of the foundation skirt, but two or three inches shorter, so as to show a pleating of the silk or satin at the foot. This velvet petticoat may either be left plain around the bottom or cut into turrets, three inches wide and five inches deep, which must be faced with the dress material. There need not be any drapery at all in the front. It is quite as stylish to have this handsome petticoat plain. But put a drapery in the back like that described last month, large pleats from the foot to within ten or twelve inches of the waist, and from there up a very full drapery of the dress material.

Insert a very narrow vest of the brocade to renew the button-holes and the button side, and make a high standing collar of the brocade, which may be prettily fastened with a clasp, either directly in front or on the side. The sleeves may be opened two inches on the inside seam, and faced two and a half inches with the brocade.

This is worn, turned over carelessly, to show the lining. It makes a very elegant dress, to have the ground of the brocade of a color, say, red or old-gold, or canary yellow, or to have the ground and bulk of the brocade black, and the high lights put in with the color. A pretty finish to such a basque is cut jet beads woven on a galloon, and sewed under the edge of the basque, around the collar and the sleeves.

A pretty evening dress for a young lady is of white, pink, or gray cashmere, combined with deep garnet velvet. The underskirt must be pleated all around, in side or box pleats, which must come within ten inches of the waist on the left side, but need not be so high around the rest of the skirt. There must be a high pannier of the velvet on the left side. The drapery of the cashmere begins a little at the left of the centre, and curves down gracefully to within about ten inches of the bottom of the skirt, on the right side. The cashmere is looped and draped in very full curves and pleats in the back, and is finished by being taken up in a jabot on the left side, which is all faced with the velvet.

The neck is cut in a square and there is a vest of the garnet velvet, which is sewed in on one side and fastened on the other by hooks and eyelets. The neck is finished with a ruche of the cashmere, pleated very full in the back and merging from the shoulder-seam to the end on the bust, in a directoire collar, stayed with wire, stiffened with canvas and faced on the side next the neck with the velvet. The elbow sleeves are finished with velvet cuffs, and the basque, cuffs and collar are finished on the edges with Roman pearl beads, sewed on singly.

MELUZINA.

HOUSEKEEPING.

Clear Brown Soup.

Four pounds of beef and veal will make two quarts of good soup. The beef should be solid meat and be cut in small pieces. The veal can be cut from the knuckle or shank, but not so low down that there will be no meat on it. Put two quarts of cold water on it, and let it come to a boil slowly; then skim it carefully; cover it tightly, and set it where it will just simmer for eight hours. Soup simmers when a slight movement on the surface can just be perceived. When it is done pour it into a dish in which it will rapidly cool, as all animal substances are better flavored if they do not remain long in a lukewarm temperature. When the soup is cold it should be jellied and the fat can then be easily removed. It will keep for a long time in cold weather, and for two or three days in summer if set in a good ice-box.

The soup should be put on to heat about three-quarters of an hour before it is to be served. Add to it eighteen

grains of whole pepper, a piece of stick cinnamon about an inch square, five cloves, and a teaspoonful of salt. The vegetables used for flavoring are carrots, turnips, celery and onion. Half as much carrot and turnip as you use of the celery and onion is a good proportion. Cut in pieces about as large as small peas, fry in butter till they are a pale straw-color and then skim them out into the soup. A bouquet of sweet herbs consisting of sage, bay-leaf, thyme, and summer savory can be tied in a bit of cheese-cloth or mosquito netting. For it use one large sage-leaf and the same sized bay-leaf, a sprig two inches long of each of the other herbs will be sufficient. A piece of fresh parsley can be put in the pot or a sprig of dried in the bouquet. Ten or twelve minutes will be all that is necessary to extract sufficient flavor if the soup is kept at the boiling point. To clarify the soup, beat the white of one egg with an egg-beater until it is nearly as stiff as for a meringue; dip a little soup into the bowl with the

egg, stir it, and then put it into the soup, which must be at the boiling point. It must be hot enough to harden the egg, and it should then simmer for a half hour, when it is ready to strain through a napkin. Put it in the kettle again and thicken it with two level tablespoons of corn-starch, mixed with cold water; boil slowly ten minutes. Egg balls, force-meat balls, little cubes of chicken breast or tender veal are suitable garnishes. The soup can be served without any thickening if preferred.

Pot-Roast of Beef.

Select a piece weighing six pounds. Wipe it carefully with a damp cloth, rub some salt over it and sprinkle with pepper. Put it into a round-bottomed iron pot over the fire and brown it slowly, turning it often. It will take about a half hour for this part of the roasting. When it is thoroughly browned put a little boiling water in the pot, add a little more salt and pepper, three whole cloves, and, covering closely, set where it will just simmer for four hours. If the water boils away, add a little more. When it has boiled the proper length of time take up the meat and remove the most of the fat; thicken the gravy, pour a little over the meat and serve the remainder in a gravy-boat. There should be a pint of gravy from a roast of the size mentioned. A piece of tough meat can be made tender and enjoyable by this method of cooking. There should be some fat on the outside of the meat; if there is not enough, have a thin piece cut and skewered to the roast.

To Remove the Bones from a Fresh-Water Whitefish.

When the fish is dressed it should be cut open only once, the back being whole. Remove the head, and with a sharp knife cut out the fins and tail with all the bones that belong to them. Then bend one side of the fish a little backward, and, beginning at the tail, loosen the rib bones from the flesh by carefully running the little finger under them and pulling them out. Then turn the fish and remove the bones from the other side. Now that the ribs are free, the next thing is to take out the backbone, to which the ribs are still attached. Begin at the top,

and, taking it firmly between the thumb and forefinger, draw them tightly the entire length of the backbone. Repeat this two or three times (each time taking a deeper hold), and you will be able to lift out the whole framework of bones without disfiguring the fish. If any bones are left through unskillful handling of the ribs they can be pulled out afterward, and if the fish should look slightly ragged it can be smoothed over with a limber knife. A very little practice will enable one to bone a fish in a few moments and then it can be cooked in any manner desired. If it is to be fried and is a large fish, it is best cut in suitable pieces for serving, sprinkled with cornmeal and fried on a hot griddle. It requires but little fat, as the fish is very rich and oily. If it is to be broiled, it can be left whole and will require no meal. In any case, place the fish to cook with the skin side up and let it cook most on the flesh side. If broiled, it should be frequently turned; if fried, only once. It is possible that there are other kinds of fish that may be freed from bones in like manner, but we have no practical knowledge in regard to any other and give no directions in the CABINET that have not been tested; therefore we merely suggest that it might be worth while to experiment.

Baked Custard.

Allow four eggs to one quart of rich milk, with sugar to taste, and whatever flavoring is liked. Beat the eggs with a spoon in such a manner as to cut them instead of making them light. A custard should not be porous, but more like soft butter, and using an egg-beater will always make it frothy. It is attention to the little points about cooking and baking that makes perfect success. The eggs must be broken or beaten till they do not string, then add the milk a little at a time and beat till eggs and milk are thoroughly mixed. Fill your cups and set them in a pan of tepid water in a moderate oven. In about twenty minutes try one of the custards in the centre with a knife. If the milk is set it is done, but if the milk adheres to the knife bake a little longer.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

Our premium seeds have been forwarded to all subscribers who have requested them. The bulbs will be sent out as soon as the season will permit.

White Plume Celery.—Next in importance to having a good article is giving it a good name and an attractive one in order to make it "take." This is particularly true in the line of vegetables. Consequently, when a newcomer is announced or discovered a characteristic name is chosen to aid in its description. In this respect all seedsmen are alike, and in another respect they are sadly too much alike, that is, in *borrowing* the name. For instance, a noted firm introduces a "White Spine Cucumber," a name truly descriptive and a variety really

valuable. Its reputation will, within two years, bring out half a dozen or more "White Spine Cucumbers," prefixed with "Catchem's Improved" or "Cheatem's Improved," when in reality there has been no improvement; if anything, a deterioration. New varieties, or improvements on old ones, cannot be brought out, as it takes long years of careful selection to establish any particular character in a vegetable or flower in order to entitle it to a distinctive name.

The "White Plume Celery" has been *improved*, like many other vegetables, and from the following letter in the *Garden* (London) we should judge with the same results.

"There are, I find, two varieties of the 'White Plume Celery.' The first I received about two years ago from

Mr. Peter Henderson, New York. It was upright in growth and attained a height of from twenty inches to two feet. Last spring another American seedsman sent me a packet of seed named Improved White Plume, and this has a very spreading habit of growth, which does not exceed one foot in height, and, although white, is very inferior to that first named. It is certainly not an improved variety, and those who wish to grow this useful new celery and see it at its best must secure the original type.—J. MUIR."

* * *

Painted Potatoes.—We have often seen innocent (?) little deceptions practised in showing fruits and flowers at horticultural exhibitions in order to gain a coveted prize, and with it a fictitious reputation as a florist or horticulturist. It is not an uncommon practice for exhibitors to borrow or buy a few kinds of vegetables, fruits, or flowers, to make up the regulation number of varieties "to be grown by the exhibitor." Neither is it a very rare thing to have two exhibitors pool their exhibits in order to "work the fair for all it is worth."

But an English exhibitor, at a recent show at Birmingham, is entitled to the inventor's first prize for deceit, in showing potatoes that he had artificially colored to enhance their beauty. The scheme, however, judging from the following report, was a failure :

"The practice to which I refer is just as 'wasteful and ridiculous.' The specimens exhibited by the two champions, Mr. Hughes and Mr. Wiles, were really beautiful, as indeed their exhibits always are, and were deservedly awarded the principal honors. This, in itself, should be a sufficient warning to the other ill-advised exhibitor never again to attempt to improve nature by smearing her face with ochre when the hue of health is enough. And if judges will in future disqualify every exhibitor who stoops to so silly and senseless a practice, it will soon be eradicated and they will have the thanks of all honorable and honest men."

* * *

Freesia refracta alba.—W. Byng, Esq., makes the following suggestion in the *Gardener's Magazine* in regard to this valuable bulb. We advise our readers to give it a trial.

"This very beautiful bulb has been frequently referred to in the pages of the *Magazine*, and always in terms of praise. It is not, therefore, necessary, in giving a hint to those who have to supply large quantities of cut-flowers, that I should extol its beauty. The suggestion I have to make is that a frame should be devoted to the freesia for the production of flowers in the spring. A bed of rich and friable soil should be made up within the frame, and in this should be planted the bulbs, about four inches apart each way. By affording sufficient protection to prevent the soil in the frame becoming frozen, the bulbs will begin to make new growth rather early in the spring, and yield a supply of flowers at a time when they are usually much in request. The soil should be maintained in a moderately-moist state, and after the growth makes its appearance above the surface of the bed the frame must be ventilated freely to prevent the foliage and flower-spikes becoming drawn."

Cyclamens.—The following hints by Thomas Baines, Esq., one of the most successful plant growers in England, will be found useful to many of our readers who have requested information as to the culture of the cyclamen :

"Where a sufficient number of these are grown, from this time onward through the winter, they will be found among the most serviceable decorative stock, independent of their use for furnishing flowers for cutting ; for bouquets and arranging in small vases they are most useful. It is necessary to keep the plants well up to the glass, as otherwise the flower stems get drawn and weak. They should be looked closely over, frequently, to see that there are no aphides on the under sides of the leaves, where they frequently remain without detection until present in such numbers that they are not easily destroyed. The best course to pursue with a view to keeping up a stock of cyclamens is to make a sowing every year ; seed sown in summer will have vegetated some time ago. If possible, the seedlings should be kept in a temperature eight or ten degrees above that of a greenhouse, standing the pans containing them in the full light, as near the glass as can be, to keep them dwarf and stout, for if at all drawn, especially in their early stages before being potted off, they are much injured."

* * *

Large Specimens of *Lilium auratum*.—During my journeys about Kent I have been in a great number of nurseries and private establishments, and among the number was that of Mr. J. J. Lonsdale, The Cottage, Sandgate, near Folkestone. This gentleman owns a very large specimen of *Lilium auratum*, which is at the present time in its full glory. The plant is shown in a pot measuring two feet six inches across ; it stands seven feet high, twenty feet in circumference, and has thirty-eight stems and 275 blossoms on it. One bulb was purchased eighteen years ago, and potted ; since that time the ball of earth has never been broken, but simply potted on. It has been shown at Folkestone and several other shows, and has always been first. I believe a fancy price has been offered for it to be taken to London, to be shown in some of the exhibitions, but the owner is very chary of letting it go far out of his sight, as he is justly proud of it (and so is his gardener, James Lilley).—*J. B., Dover.*

* * *

***Lilium auratum*.**—It is strange that some of our amateur friends do not grow the *Lilium auratum* in pots, as our English cousins do ; and which, judging by the success they have obtained by this method of culture, is the proper way to grow a lily with such eccentric habits. There was lately on exhibition at Aberdeen an *auratum* grown in a ten-inch pot bearing fifty-five fully developed flowers on a single stem, a result that, we believe, has never been attained in this country, excepting with specimens having fasciated stems, which are simply monstrosities, and do not furnish perfect flowers.

* * *

The Chocolate Girl.—Possibly most of the people who are familiar with the picture of the chocolate girl, used so long as an advertisement, think it a creation of some artist's fancy. On the contrary, it is a portrait, the por-

trait of a very pretty Viennese woman, and has a romantic story attached to it. It seems that some years ago a young German student of noble birth fell in love with the pretty chocolate girl who served him with this delicious beverage in a Vienna café. She was a respectable girl and he an honorable gentleman, and he married her. He felt proud of her humble origin, and had her portrait painted by a famous German artist in the picturesque costume she wore when he first met her; and this portrait is now among the most valued art treasures of the government.

Catalogues, &c., Received.

James Vick, Rochester, N. Y.—Holiday number of "Vick's Floral Guide," combined with their annual illustrated catalogue of vegetable and flower seeds, bulbs, plants and all garden requisites. The combination makes a valuable book for reference.

De Veer & Boomkamp, 19 Broadway, New York, agents for the United States and Canada of Ant. Roozen & Son, Overveen, Holland, growers and retail dealers in all kinds of bulbs and herbaceous plants, making a specialty of gladioli, dahlias, anemones, the iris, cannas, begonias and amaryllis. Their catalogue is very rich in cultural instructions.

Hiram Sibley & Co., Rochester, N. Y.—Annual catalogue of "Tested Seeds," prepared to meet the wants of market gardeners, agriculturists, and amateurs.

Burpee's Farm Annual, W. Atlee Burpee & Co., Philadelphia, Pa.—A very handsome and complete catalogue of everything that is required for the farm and garden; vegetable and flower seeds, bulbs, plants, fancy poultry, &c. Sent free to all applicants.

Shaker Seed Co., Mount Lebanon, N. Y.—Descriptive and illustrated annual catalogue and amateur's guide to the flower and vegetable garden, sent free to all applicants.

D. Landreth & Sons, Philadelphia, Pa.—Annual catalogue of their "American Pedigree Seeds" for the season of 1886. A specialty is made of American seeds for the American climate.

Peter Henderson & Co., 35 Cortlandt street, New York.—Annual illustrated catalogue for 1886 of "Everything for the Garden," either useful or ornamental. The colored illustrations are fine and worth much more than the price of catalogue (five cents). Also their quarterly wholesale price-list of plants and flower seeds, and their quarterly catalogue for market gardeners and truckers.

Young & Elliott, 18 Cortlandt street, New York.—Wholesale catalogue of vegetable and flower seeds, bulbs, florists' supplies, &c., &c.

A. D. Cowan & Co., 114 Chambers street, New York.—Annual illustrated catalogue of vegetable and flower seeds, plants and implements. Seeds for market gardeners a specialty.

Samuel Wilson, Mechanicsville, Bucks County, Pa.—Tenth annual catalogue of garden, field and flower seeds and vegetable plants.

E. Hippard, Youngstown, Ohio.—Illustrated catalogue of roses, greenhouse plants, vines, shrubs, &c.

J. M. McCullough's Sons, Cincinnati, Ohio.—A very beautiful illustrated catalogue of vegetable, field and flower seeds, bulbs, &c. Sent free to all applicants.

The Dingee & Conard Company, rose growers, West Grove, Chester County, Pa.—The new guide to rose culture, beautifully illustrated with colored plates, and complete in information in regard to rose culture.

The Storrs & Harrison Company, Painesville, Ohio.—Illustrated and descriptive catalogue of vegetable and flower seeds, bulbs, plants, ornamental and fruit trees, shrubs, and everything wanted for the farm or garden.

Queens County Agricultural Society.—Forty-fourth annual report for the year ending 1885.

Johnson & Stokes, Philadelphia, Pa.—Farm manual for 1886 and catalogue of vegetable and flower seeds, small fruit plants, &c.

Beach & Co., Richmond, Ind.—Annual catalogue of greenhouse and bedding plants. Roses a specialty.

Hill & Co., Richmond, Ind.—Annual catalogue of roses, bulbs and miscellaneous plants for the garden and greenhouse.

Massachusetts Horticultural Society.—Schedule of prizes for 1886.

ANSWERS TO CORRESPONDENTS.

Crown Imperials.—*Mrs. Kate Briggs.*—No, it is not best to put out crown imperials in the spring. In fact, it is not possible to procure the bulbs at that season, as they are the first, or at least among the first, to put in an appearance in spring. They do not seriously object to a little freezing, which they invariably get in this climate, as we frequently have several degrees of frost after they are three or four inches high. They should be planted in deep, rich soil as early as they can be obtained in autumn, and they must not be disturbed when growing.

Carnations.—*Violet.*—The proper way to get carnations in summer is to grow them from seed. Get seed of the best strain possible of hardy carnations; sow in finely

prepared soil about the first of July. When the plants are two inches high transplant to the place in which they are wanted to bloom. Scatter a few newly-fallen leaves over them. When winter approaches cover the ground three inches in depth, and the coming season will give you such a show of carnations as no greenhouse could ever furnish. If the same seed is sown in a hot-bed early in March, and the young plants transferred to the garden in June, they will come into flower about the first of September, keeping up a succession until after severe frosts.

Moles.—*Same.*—The best remedy against moles that we have tried is Hale's mole-trap. This, if properly attended, will rid the garden of these pests.

THE LADIES' FLORAL CABINET.

Chinese Lily Bulb.—*Mrs. C. B. T., Conn.*—The "lily" you have is, without doubt, *Narcissus orientalis*, about which we take the following from Ant. Roozen & Sons' (Haarlem) catalogue :

"Many Americans will wonder what kind of flowers, grown in basins, filled with water and stones, the Celestial laundrymen have in their windows during winter. It is the Holy Flower of the Chinese, and blooms in their native country on or about New Year's day. The successful flowering of this bulb gives them the assurance of a profitable year ; if it fails to bloom John Chinaman puts on his mourning. It is a species of narcissus, found wild in China and the southern part of Europe, and our beautiful *Polyanthus narcissi* are seedlings cultivated in Holland. The double Roman narcissus is the double-flowered Chinese species, and this one, as well as the other varieties of the polyanthus section, can be grown to perfection in water if treated like the hyacinth."

After flowering, it should be planted in the garden, as it cannot be grown again in water until it recuperates its strength.

Orchids.—*Mrs. P. E. Reynolds, Cal.*—Orchids are grown in various ways—in baskets, on blocks and in pots, each class requiring special treatment. We cannot advise you as to cultivation without knowing what species you have.

Small Flies.—*Mrs. J. A. Bowen.*—Plants have to struggle against so many insect enemies that it is impossible to say, without seeing them, which it is that causes you so much trouble. We would advise putting coarse tobacco on the tops of the pots, as it is very effective against the green-fly (aphis) and, in fact, against nearly all other insect enemies.

Sour Soil.—*Same.*—There is no way to restore a sour soil to usefulness, except turning it over to the elements. Throw it out ; wash the roots of your plants in tepid water, re-pot in good sweet soil ; use pots no larger than sufficient to hold the roots without crowding and give them good drainage.

Imatophyllum in Variety.—*Mrs. H. C. Wiley, Vt.*—We have sent your address to the party most likely to have the plants you desire. You will get a catalogue in good time.

The justicias are all of easy culture and will do well as window-plants. They are not particular as to soil, ordinary greenhouse culture will suit them. The phoridium is another easy subject to manage. It can be used as a lawn plant during summer and will be an ornament to the window-garden during winter. Grow in a moderately rich soil and water freely when in active growth ; re-pot when new growth commences, but not unless its roots completely filled the pot.

The *Thunbergia lancifolia* is a very beautiful greenhouse climber and requires more heat and moisture than a living-room affords. The same is true of the allamanda. Neither is adapted for house culture. The nerines will grow nicely in your window. They have a season

of active growth, and when over they should remain perfectly dry until they show their flower spikes ; then water freely and give plenty of light.

After flowering, re-pot without disturbing the ball of roots, shake off part of the old soil, replace with new and put back into the same pot if possible ; if not, use one but very little larger. They will do nicely without changing oftener than once in two years.

Plants for a Hedge.—*Rusticus.*—The best shrub for a hedge is *Ligustrum ovalifolium* commonly known as California privet. It is perfectly hardy, grows rapidly, its foliage is dark glossy green and remains so until about the first of December. It is propagated freely by cuttings, which should be taken off about the first of December and kept in sand until spring ; then set about a foot apart where they are wanted to grow. They will form a splendid hedge in two years.

Gloxinias.—*D. D. J.*—Keep your tubers quite dry until about the first of March, or until they show signs of growth. Then shake out the old soil and re-pot in fresh soil, a light, rich, fibrous one being preferable. You can divide the tuber if you wish to increase your stock, but we should prefer to grow it entire and propagate from the leaves when they attain their full size in summer. Take the leaves off with about half an inch of the leaf-stalk and insert round the sides of a pot filled with sandy soil.

Forcing Rhubarb.—*Amateur.*—Commence at once, select a few good roots, according to the supply you wish, put them in pots or boxes, as most convenient, and place them in a warm cellar, or any other warm place, and you will have an early supply. Take up and treat in the same way a few plants every three weeks, and you will have a supply until that growing in the open ground is ready for use.

Watering Plants.—*Novice.*—There can be no rule laid down in regard to watering plants, other than to water no oftener than is really necessary, and when you do water do it thoroughly. Some plants will consume three times as much as others in a given length of time ; you must therefore be governed wholly by the plant's necessities. It is well to know that plants are quite as apt to be injured by too much water as for the want of it. The plant will show you plainly by the drooping of its leaves when it should be watered, and it will not be injured if dry until then. Callas are aquatic plants, and if in a warm room it will not injure, but rather benefit them to have the pots set in a basin of water.

Deutzia Gracilis.—*Annie L. Hayden.*—This is a hardy shrub, and requires a season of rest, which should be in winter, after which it forces readily ; but, like all other hardy plants, it should have a period of freezing before it commences to grow. Take up the plants and heel them in, in such a manner that they can be got at readily when required. They will come into bloom in six weeks from the time they are brought into the house, and they make fine decorative plants.

NEWSPAPER WAIFS.

—THE PLURAL OF FORGET-ME-NOT.—A little girl, when asked to write the plural of forget-me-not, wrote "forget-us-not."

—"Down?" said the feather merchant. "Yes, ma'am, we have pillows filled with down. Will you have eider or Arctic down?"

"Eider will suit me," said she. "I don't care which it is."

NATURE'S LIMIT OF HUMAN LIFE.

The advance of human civilization has brought with it better habitations, better clothing and better food. Instead of only the flesh of animals, the product of the chase, varied by the use of nuts and wild fruit, in limited and fitful supplies, the commerce of modern times places on many tables a variety gathered from every land. A list of the articles on almost any table in Philadelphia at meal time, with the countries from which they have been gathered, will aptly illustrate this. Instead of the skins of animals, dressed with the hair or fur on, men and women are costumed in such a variety of fabrics that their enumeration would make a still longer list than the articles of food on their tables. And a comparison by any family in Philadelphia of the house in which they live, and its conveniences, with the abode of ancestors of a few centuries back, with its lack of conveniences, would be an exceedingly interesting subject for thought. These changes in methods of living explain how in recent years scientific men have been enabled to announce that there has been a large advance in the duration of human life. They state that within the present century the average has increased from about twenty-six to about thirty-six years. In the columns of a Philadelphia daily newspaper every week there is a list of persons who have attained to over fourscore years. To many the ambition to live long is very dear. And with the advantages for personal care there seems to be no reason why that ambition

may not be gratified. With means at hand, also, to avoid or to overcome the diseases which have done so much to undermine and weaken the body, the reasons for longer life are multiplied.

"Although my mother is eighty-one years old she feels as well as she did when forty years old; although not so strong, she walks around the house spryly and does considerable work. She is living, she says, a new life."—*From a lady at North Waterford, Me.*

"You will doubtless remember my getting your Compound Oxygen for my mother, who is very aged, in February or March of 1884, and its happy effect upon her. Her restoration to health has attracted considerable attention in this section. I feel deeply grateful for this result, and shall continue to recommend your remedy by voice and pen."—*W. H. Worthington, editor "New South," Columbus, Miss.*

"I am feeling very well. The dropsy left me and my legs are now all right. The swelling has all gone down. Your Compound Oxygen saved my life and cured me. I will be eighty-two years old the fifth day of November next."—*Aaron Sturges, Southport, Conn.*

"I have steadily improved. I have renewed my age ten years or more."—*A lady of Lawrence, Mass.*

In 1870 a gentleman living in Philadelphia, suffering from disease of the heart, was treated with Compound Oxygen and entirely restored to a good condition of health. With this relief from heart trouble came relief also from corpulency, his weight decreasing from one hundred and ninety-eight pounds to about one hundred and sixty. (His case appears on page seventy-eight of "Compound Oxygen: Its Mode of Action and Results" a brochure published by Drs. Starkey & Palen, 1529 Arch Street, Philadelphia, which they send freely to all applicants.) A few years after being treated for and cured of heart disease, he also tried Compound Oxygen for relief to his eyesight. Although, at the time of beginning, he supposed himself to be suffering from cataract and expected to undergo an operation by an oculist, for which he had arranged, he was in a

short time so far recovered as to be able to read with comfort quite fine print without glasses. When asked whether he experienced the sensations of which a few speak, during the inhalations, he said, "Oh, yes! and I felt as though I hadn't a poor relation in the world." This gentleman is Mr. L. O. Howell, still living, in good health, enjoying a serene old age (in his eighty-fourth year), at No. 651 North Thirteenth Street, Philadelphia. Friendship for the physicians and gratitude for health and life prolonged lead him now to allow the use of his name as a reference.

—One of the largest dealers in supplies for ladies' fancy work in the United States, Mr. T. E. Parker, of Lynn, Mass., makes some tempting offers to ladies in our advertising columns this month.

—"What do they do when they install a minister?" asked a small boy. "Do they put him in a stall and feed him?" "Not a bit," said his father; "they harness him to a church, and expect him to draw it alone."—*Boston Transcript.*

DON'T READ THIS,

if you have a sufficiency of this world's goods, but if you have not, write to Hallett & Co., Portland, Me., and receive free full particulars about work that you can do and live at home, at a profit of from \$5 to \$25 per day and upwards. All succeed; both sexes, all ages. All is new. Capital not required; Hallett & Co. will start you. Don't delay, investigate at once and grand success will attend you.

—PATERNAL JOKE.—Papa (soberly)—"That was quite a monstrosity you had in the parlor last evening."

Maud (nettled)—"Indeed! That must depend upon one's understanding of the term 'monstrosity.'"

Papa (thoughtfully)—"Well, two heads upon one pair of shoulders, for example."—*Binghamton Republican.*

—Those who have used the Boss Zinc and Leather Collar Pads and Ankle Boots say they are the best and cheapest because most durable. They will last a life time. Sold by harness makers on sixty days' trial. Dexter Curtis, Madison, Wis.

THE SALVATOR FOR INVALIDS AND THE AGED. AN INCOMPARABLE ALIMENT FOR THE

A SUPERIOR NUTRITIVE IN CONTINUED FEVERS.

IMPERIAL GRANUM
GREAT MEDICINAL FOOD

INTERNATIONAL EXHIBITION AWARDED BY UNITED STATES CENTENNIAL COMMISSION PHILADELPHIA MDCCLXXXV

SOLD BY DRUGGISTS.
Messrs. Carle & Sons, N.Y.

JOHN CARLE & SONS - New York.

A RELIABLE REMEDIAL AGENT IN ALL DISEASES OF THE STOMACH AND INTESTINES.

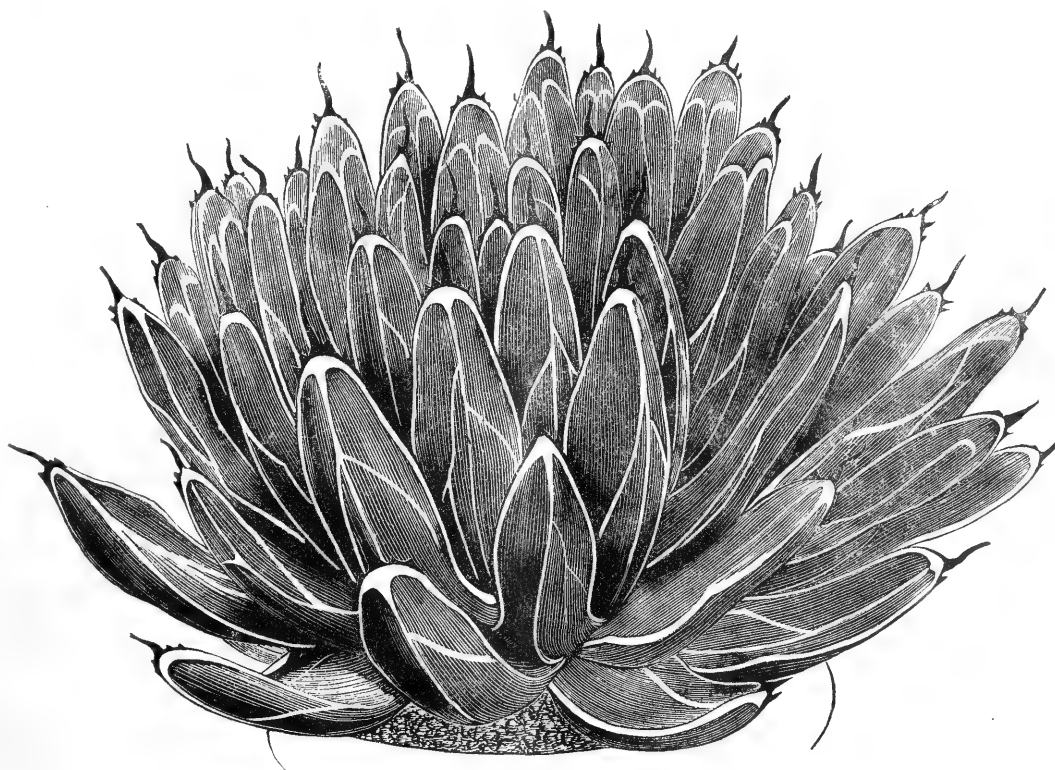
GROWTH AND PROTECTION OF INFANTS AND CHILDREN.

LADIES' FLORAL CABINET.

Volume XV.

MARCH, 1886.

No. 3.



AGAVE VICTORLE REGINÆ.

THE AGAVE.

THIS is an exceedingly interesting family of plants belonging to the natural order *Amaryllidaceæ*. It abounds in Central and South America, although one species, *A. Virginica*, is found in the United States and is common from the Carolinas southward.

The agaves are massive-growing plants and form magnificent ornaments for the greenhouse, conservatory and for lawn decoration during summer. The varieties with striped foliage are considered the most desirable for decorative plants. It was a prevailing idea at one time that this plant only bloomed once in a hundred years; but this is now found to be a popular error. If given sufficient heat it will flower when ten or twelve years old. The flower stem rises from the centre of the plant to a

height of about thirty feet, bearing an immense number of yellowish green flowers from two to three inches long. As many as 4,000 flowers have been produced on a single panicle. After flowering, the portion of the plant above ground perishes, but the root continues to live and sends up new suckers from the base of the old plant, by which means it is propagated.

In its native country the genus is included among the most useful of economic plants. *A. Americana*, the first discovered species, when used for fences, forms an impenetrable hedge. By maceration of the leaves, which are from five to seven feet long, coarse fibres are obtained, which are used under the name of *maguey*, for the manufacture of thread, twines, ropes, hammocks, &c. This

fibre is also known as Pita Flax. It is not very strong or durable, and if exposed to moisture it soon decays. The ancient Mexicans employed it for the preparation of a coarse kind of paper, and the Indians used it for oakum. The leaves cut into slices are used for feeding cattle. *A. Mexicana* is particularly described by Humboldt on account of its utility. When the innermost leaves have been torn out, a juice continues to flow for a year or two, which, by evaporation, yields sugar, and when this is diluted with water, and subjected to four or five days' fermentation, it becomes an agreeable but intoxicating drink called *pulque*, of which the Mexican Indians are exceedingly fond.

The roots of *A. saponaria* are used in Mexico for washing; the juices form a lather with salt-water as

well as with fresh, and the juice of the leaves made into cakes is used for the same purpose.

A. Victoria Regina is one of the most beautiful for greenhouse culture or for lawn decoration. It was introduced from Mexico in 1875, under the name *A. consideranti*, and is as yet a very rare plant. It is described as follows: "Leaves forty to fifty in a sessile rosette, stiff, rigid, lanceolate, six inches long, one and a half to nearly two inches broad above the dilated base, narrowed gradually to a rather obtuse point; in color a dead green, margined with a continuous white border. Not splitting up into threads, but leaving distinct white vertical bands where it is pressed against the neighboring leaves; terminal spine half an inch long, black, pungent, with usually one or two small spines on each side of it."

HARDY ORNAMENTAL BIENNIALS.

ACCORDING to Dr. Asa Gray, "A biennial herb, such as the turnip, carrot, beet and cabbage, grows the first season without blossoming, survives the winter, flowers after that and dies, root and all, when it has ripened its seed." But for my purpose I shall not adhere strictly to this rule, because the circumstances under which plants are grown have much to do with their behavior. For instance, in sandy soil columbines are good perennials, whereas in clay ground my experience with them is that they can be grown more successfully as biennials than as perennials; in our Northern States *Gilia coronopifolia*, no matter how early it may be sown out of doors, often acts as a true biennial, while in the Middle and Southern States it usually acts like an annual—"flowers in the first year, and dies, root and all, after ripening its seed." Many plants, *Nemophila phacelioides* and *Adlumia cirrhosa*, for instance, come up in the late summer or fall months, live over winter and blossom next year in true biennial style, but if sown in early spring we may expect them to blossom the same year in true annual fashion. Hosts of annuals—witness, marigolds, cornflower and larkspur—self-sow themselves, come up in August, live over winter and blossom next spring and summer.

I regard the following as good biennials. True, some of them are usually ranked as perennial, but I have grown them all uninterruptedly for many years, and always have found them more satisfactory when treated as biennial.

ALPINE WALLFLOWER (*Chieranthus alpinus*).—A neat, very dense, mat-like, evergreen little plant; six to eight inches high when not in bloom; when in flower, ten to fourteen inches high. It lives well in a sunny border, should be grown on rising ground, dislikes shade and wet. It is perfectly hardy, uncommon in gardens, easily raised from seed and easily grown after it has been raised; never blooms the first season, but next year in spring it is one of the brightest, showiest and most profuse of hardy flowers. It is, however, uncertain as a perennial.

ALYSSUM SAXATILE.—Usually called golden alyssum. Of neat tufted nature, evergreen, a good biennial, but an uncertain perennial; common in gardens; bears a profusion of golden yellow flowers in spring. Likes a sunny place and where water will not lodge about it.

CANTERBURY BELLS (*Campanula Medium*).—Among the showiest of our summer plants, common in most gardens and easily raised, but a little tender. A good winter mulch of dry leaves saves them greatly. If sown in early spring the plants often get so big and leafy before winter that they are apt to rot off. I find it better to sow in July. Don't forget the cup-and-saucer (*calycanthema*) forms. *Campanula Sibirica*, a smaller and less showy plant, is after the same fashion as the Canterbury bells. Wanner's campanula is also a biennial, a neat, desirable little plant, with unproportionately large foxglove-like purple flowers.

FOXGLOVES (*Digitalis purpurea*, and varieties).—Old-fashioned and most effective plants in the summer-garden. Sow in spring or summer, and grow them in a plat for convenience in mulching them in winter, for they are a little impatient of zero. In earliest spring transplant them to where you want them to bloom. They grow from two to four feet high.

HOLLYHOCKS (*Althæa rosea*).—Grand, old-fashioned stately plants. There are many showy singles, but I prefer the doubles. The seeds germinate freely, and the seedlings grow vigorously. If sown in early spring, some of the plants will bloom the next fall, and all, even if not raised before midsummer, will bloom the next year. They are gross growers, and like good living. Stake them early if you wish to enjoy them when in bloom. In winter mulch them deeply with dry oak-leaves. With care we may keep them along as perennials.

ITALIAN ALKANET (*Anchusa Italica*).—A tall, branchy, rough-growing, but very showy plant; good enough in roomy gardens, but not to be recommended for small plats. Sometimes it establishes itself as a perennial, spreads by underground stems and becomes a nuisance; at other times wireworms, false wireworms and

rot forbid its perennial existence. There are some lesser and brighter species.

MICHAUXIA CAMPANULOIDES.—A remarkable bell-wort, easily raised, easily summered and easily winter-killed. But if you put a heavy winter-mulch over the roots you can save them. Grown in masses it has a striking effect. When in bloom it is from three to six feet high; the flowers are large, white, wheel-shaped, drooping and recurved.

MULLEIN PINK (*Lychnis coronaria*).—A common garden plant, often known as Rose Campion, and according to variety has rosy purple, dark crimson or white flowers. The leaves are white-cottony. The plant very seldom blooms the first year from seed, no matter how early it has been sown.

OLYMPIAN MULLEIN (*Verbascum Olympicum*).—Only a mullein, but still the grandest, showiest and stateliest of the race. In summer, from its rosette of leaves, which is from three to five feet wide, a stout candelabrum-like stem arises, five to nine feet high, branched from the ground upwards, and all a mass of golden blossoms. Like the flowers of flax these drop at noon, but only to be next day succeeded by as gay a host. The seeds should be sown early in spring to allow the plants a full year's growth before their blooming time; indeed, they sometimes run two years before they bloom.

ROCKET (*Hesperis matronalis*).—A common, rough, free-blooming herb running wild about old gardens, and often a persistent perennial. The species *H. violacea* is a biennial, but no improvement on the old rocket; so too is the species *H. tristis* a biennial. It is less showy than the old rocket and only admissible as a garden plant on account of the sweet fragrance of its flowers at night.

SWEET SCABIOS (*Scabiosa atropurpurea*).—More properly this is an annual. But by sowing in summer and mulching with leaves in winter it blooms in spring, and under favorable circumstance continues in blossom during summer. Even plants that may have blossomed the first year may be saved for another season's work, but as they are so easily raised from seed every year this is not advisable.

SILVERY-LEAVED SAGE (*Salvia argentea*).—This, also *S. chionantha*, both fine, showy plants, are usually regarded as perennials, but with me, while they are capital, showy biennials, they are useless as perennials. They do not bloom the first year. They have immense branchy spikes of white flowers.

STOBÆA PURPUREA.—A thistle-looking plant, with large purple flowers in summer. Usually regarded as a perennial, but with me of use only as a biennial. It needs a warm, sheltered, sunny place that is dry in winter.

SWEET-WILLIAMS (*Dianthus barbatus*).—Old-fashioned favorites. I raise them from seed every year; sow in spring, transplant into a bed where I can take care of them for a while; then, either in early summer or fall, put them in their blooming quarters. They flower better if not disturbed in spring before coming into bloom. Indian pinks are also regarded as biennials, but I prefer treating them as annuals.

YELLOW ROCK-CRESS (*Erysimum rupestre*).—This little plant forms a broad, thick, evergreen mat, which is bright and cheerful in summer, and early in the succeeding spring one sheet of little yellow blossoms. On raised sandy land it often succeeds as a perennial, but, as it gets patchy, I like it best as a biennial.

GLEN COVE, N. Y.

WILLIAM FALCONER.

CARNATIONS.

THE interest given of late to rose growing by the leading florists around New York has left the carnation but few friends or advocates among those who grow flowers for the market. The consequence is that well-grown carnations meet with ready sale at remunerative prices. We should say here, however, that the growers have also become discouraged with this flower because of a disease to which it is subject, and for which they have found no remedy. So common has this disease become in some localities that the cultivation of the carnation has been abandoned; and because of the disease and the popularity of the rose this ever-beautiful flower has lost nearly all its friends, at least, such as were friends when the friendship was profitable.

Failure, however, is not universal; we recently saw at C. L. Allen & Co.'s greenhouses the finest carnations we have ever seen, all in perfect health, with an enormous show of flowers that for size far surpassed our expectations. Flowers two inches and three-quarters in diameter were to be seen, and their white carnations average two inches and a half in diameter.

For the benefit of our readers we were told the secret

of success, which is indeed very simple, more so than the cultivation of almost any other flower grown for the trade. But simple as the cultivation is, the conditions most favorable for the perfect development must not be interrupted in the least from the time the cuttings are taken until they are done flowering. Their wants are few, but imperative. Cuttings are taken off about the first of February, and not suffered to wilt before they are put into the propagating bench, which is in a moderately cool house, with slight bottom heat. In about three weeks they are nicely rooted, and are then pricked out into flats (shallow boxes) filled with good potting soil, setting them about one inch and a half apart each way. These flats are placed in a cool house, where they remain until the plants are ready for the field in which they are to grow during the coming summer.

When the plants are about three inches high they are cut well back—say to within an inch of the ground—in order to make them branching and stocky. The young plants are turned out into the field the first rainy day after the 10th of May, when all danger of severe frost is past. The soil best suited to the carnation is a heavy,

rich loam, which should be worked as deeply as possible. Plant in rows thirty inches apart, and set the plants a foot apart in the rows. We were assured that the success of the crop depends in a great measure upon the treatment the plants receive in summer, and that there is no plant that requires so deep and constant cultivation. The horse cultivator is the only implement employed, and this is kept in constant use; the plants are cultivated as soon as the ground will answer to work, after every rain, and as frequently as once a week under any circumstances. And this is not merely surface work; on the contrary, the ground is stirred up as deeply as possible. The plants are cut back two or three times during the season, but not after the 20th of July. The time for cutting back carnations will, however, depend very much on the variety; for instance, *Hinzey's white* must not be cut back after the first of July; if it is, it will not come into flower until the spring following. Other sorts may be cut back until about the 1st of August. Experience is the only sure guide in this part of carnation growing.

This cutting back produces plants with from twelve to fifteen good vigorous shoots, nearly ready to show bud by the 15th or the 20th of September, when they are taken into the greenhouses. Here they are planted out in benches, about one foot apart each way. The soil used is well rotted sod, which is prepared in the spring by getting the best turf that can be obtained and piling it up with the upper surfaces of the turf placed together, and between them is scattered a thin layer of stable manure. The pile is made a little lower in the centre in order that it may retain all the rain that falls during summer. This heap receives no further attention until it is wanted for use, when it is taken into the houses in as coarse a condition as possible, care being taken to throw out all live roots.

The benches are first carefully covered with freshly-cut turf, inverted to prevent growth. Upon this the prepared soil is put to the depth of four inches. In this the plants fairly delight, and immediately set to work with a will that knows no defeat.

As soon as convenient, after the plants have become well established, the surface of the ground is covered with tobacco stems—say, half an inch in depth. This is a sure preventive against green-fly, and, in fact, all other insect enemies. Now they have but one other desire—that is to be kept cool. This must be respected, or failure will be the result. As a rule, keep the temperature as near 35° at night as possible, and not above 60° by day, and give them all the air that can be obtained, but have ventilation so arranged as to avoid cold draughts. In watering, be governed by necessity; excess either way is more injurious to the carnation than to most other plants. The soil must not get soddened. Neither should the roots become dry, for from this neglect they rarely recover.

The next important consideration in carnation culture is the selection of varieties. In this, two important facts are to be noticed: First, what flowers will sell the most readily; second, what varieties will bloom the most freely. One great mistake, we were told, is in growing too many varieties; if possible have but one variety in a house, and do not grow more than three sorts at the most, and let these be positive colors. Messrs. C. L. Allen & Co.'s collection consists of the following sorts:

Hinzey's White.—The finest white carnation under cultivation; the flowers are very large and of perfect shape, rarely ever bursting the calyx; color pure white when fully opened. It is a continuous bloomer, and the flowers will remain long on the plant without injury.

Black Knight.—A very dark, rich crimson flower, of large size and good form; it is very fragrant, and a free bloomer. The only objection to this flower is its liability to burst; in all other respects it is perfect.

May Queen.—The last of the three, and as far as blooming qualities is concerned the best of all. The flowers are well-formed, large, and of a clear rich pink. It is a continuous bloomer as well as a prolific one, and these are two admirable qualities.

THE HERBACEOUS BORDER.

HERBACEOUS plants are getting more attention now than for some time back. The great rage for summer bedding plants of late years had almost forced the culture of our good old hardy plants into a corner; but a reaction is taking place, and while the summer bedding system shall still continue, place is found for hardy plants and a tendency to give them once more a fair chance.

In the early spring, before any of the tender so-called bedding plants can be set out, we can enjoy anemones, campanulas, &c., and long after September frosts have destroyed the beauty of the ribbon-beds and the gay geranium, we have tritomas, *Anemone Japonica*, chrysanthemum, &c., while during summer, if a judicious selection has been made, some one can be always had in bloom. With those who have no means of raising tender plants, the herbaceous bed is a continual source of pleasure.

The greatest drawback in the culture of this class of plants has been an apparent ignorance of their requirements; some require rich soil, while others produce their blossoms only in poor soil, and if planted indiscriminately together in a bed only suited for one class, disappointment can only result.

Some of our finest native herbaceous plants are found most luxurious in a partially-shaded position, with leaf-mould to grow in. Most all shade-loving plants do best in a soil containing a large proportion of decayed vegetable matter.

Some of your more rural readers may be so situated as to enjoy growing near their home such plants as bloodroot (*Sanguinaria Canadensis*), with its large white, handsome flowers; trillium, or wake-robin, with its large lily-like flowers; dog's-tooth violet, with its

beautiful nodding flowers in early spring, besides hosts of others which can be transferred to the flower-garden and improved rather than impaired with extra care in their culture.

For growing a general collection of herbaceous plants use a good sandy loam, deeply dug and liberally supplied with a dressing of manure decomposed to a fine soil or good fresh leaf-mould, being careful that there is not many half-decayed pieces of wood, as they are liable to produce fungi detrimental to all kinds of plant roots.

In arranging the plants study the heights of the different kinds, their seasons of flowering and plant accordingly. Do not plant together such kinds as have great masses of roots or that require a large amount of food, as in such cases the one deprives the other of a full supply, and as a consequence neither of them attains anything like perfection. Shallow-rooting kinds are apt to readily dry out during summer, and as a preventive a mulch of suitable material is necessary. Freedom from weeds and a clean surface should be the constant rule.

M. MILTON.

BULBS AND TUBERS FOR OUT-DOOR CULTURE.

(Read before the Massachusetts Horticultural Society, February 13, 1886.)

IF I did not know of the enormous will-power and energy of the people of New England, I should wonder why lovers of fruits and flowers did not seek a more genial climate. But the same spirit which brought their forefathers here bids them stay in the land of their ancestors' adoption. The frigid winters and scorching summers surely dishearten but do not entirely discourage. True as the needle to the pole, the true New Englander gathers up what is left and patiently as he can (for there is a limit to human endurance) repairs damages, replaces winter-killed plants, protects from too severe rays of the sun, and leaves the result, as he must, with Him who gives the sunshine and the rain. There are about three certain summer months, with a possible fourth, if there is no early frost. What, then, can we grow in the way of bulbs and tubers that will give pleasure and profit? The subject of bulbs and tubers for out-door culture is very broad. Much has been said on the subject, and we have much to learn.

Experience, that sternest of teachers, is each day teaching us something new. Sometimes the lesson is dearly bought, but if the result is favorable we do not care. It is very aggravating after we have petted plants in the greenhouse or conservatory to find by experimenting that they do better out of doors, either bedded out or in a cold-frame. There are no certain rules for cultivating any plant, so much depends on the location and exposure. Two gardens may be side by side, but one may be sheltered from the north wind and the gardens will in many respects be entirely unlike. Each person must select the best place, or what in his opinion is the best place, for different plants, and if it is found that they do not thrive there, next year change the location. No amount of obstinacy will make a plant grow if it is not at home. I have changed plants that did not thrive several times until they seemed to grow because they were exactly suited. There is no pleasure in growing a plant that simply drags out a miserable existence. It is best, as far as practicable, to change the location of many kinds of bulbs and their kindred, as well as bedding plants every year. One plant absorbs the element that another declines. And so change is very beneficial. We must take special note of the country from which our tubers, &c., come; what are the conditions of sun, soil and climatic changes. Some require partial shade, others the

full rays of the sun. The careful student of nature takes note of all this, and the result well repays him. I often hear one person say to another, "I wish I were as successful in my garden as you are in yours," and I cannot help feeling amused when I think of how the plants are set out and cared for in the unsuccessful garden.

Bulbs, tubers and corms, or hard bulbs, as they are commonly called, are elongated root-stalks and are simply storehouses for the embryo plant which they nourish and sustain until the roots start. Bulbs enlarge and form bulbs from the sides, top, and sometimes on the plant itself. Tubers increase in size, and produce eyes or buds which can be divided at each bud. Corms increase generally from the top of the old corm, which decays. In describing different bulbs, tubers and corms I shall not attempt to classify them, but speak of the bulb indiscriminately, as that is the word generally used, and it would confuse many people to attempt to separate them into classes. In the Northern States we have quite a good many indigenous lilies, arums, &c., but we cultivate very few of them, because we like them best in their native haunts. If cultivation would improve them it would be worth the while to transplant to our gardens, but in many cases it is almost impossible to make them grow satisfactorily. It is best, therefore, to let native plants and bulbs alone, unless we have a place as nearly as possible like that from which we take them. Our native lilies, *Canadense* and *superbum*, do well in cultivation, and well repay the cultivator. It would be of no practical use to speak of spring-flowering bulbs, such as snowdrops, hyacinths, crocuses, tulips and narcissi, as these are, or should be, already in the ground.

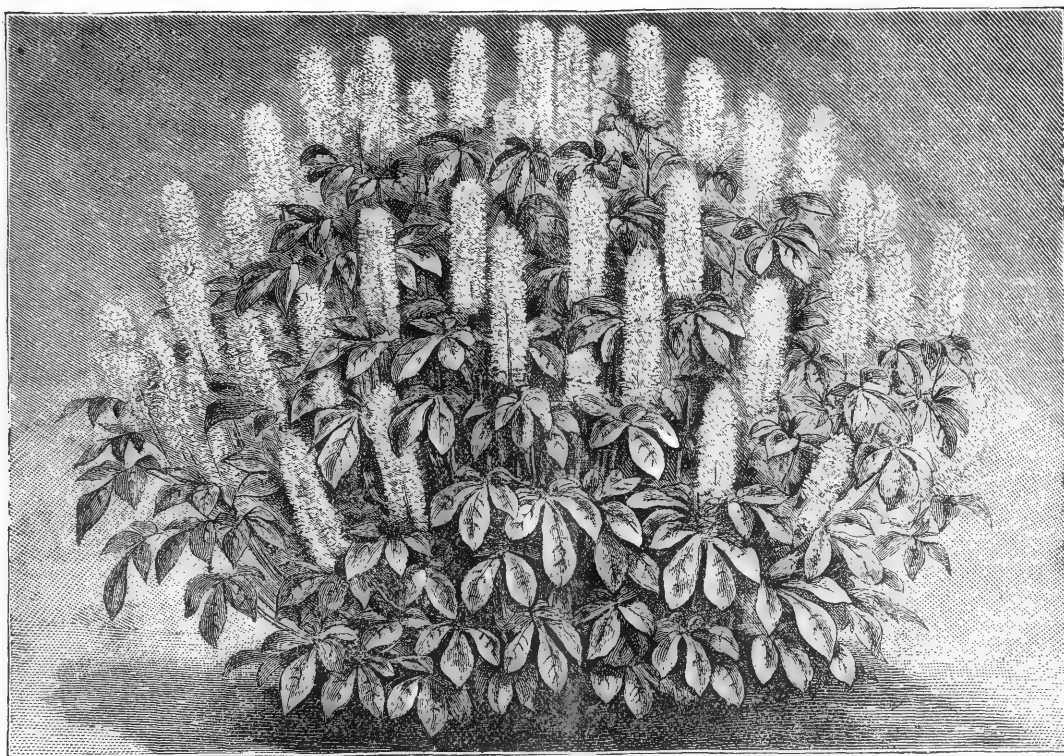
Our climate is so variable that we can never tell when we are out of the reach of frosts. Location makes a difference of a week or ten days. In some sunny, sheltered spot we feel sure we might plant anything without fear of frost, and within a hundred feet find the ground frozen so hard we could not plant for ten days. There are some bulbs that would take no hurt if the ground froze an inch after planting, and there are others that feel the slightest chill. I have planted gladioli early and had the tops chilled, with no injury, but tuberose must wait until the ground is thoroughly warmed and likely to stay so. Lilies are among our most reliable bulbs after the bloom of spring flowers has passed away. *Lilium candidum*



LEAVES AND RACEMES OF SMALL-FLOWERED BUCKEYE (*Pavia macrostachya*). (See Notes and Comments, page 80.)

is one of the hardiest of the lily family, but it is also the most particular about the time of planting. The bulbs must be planted when in a dormant state, which is the last of August or the first of September. The bulbs start in the autumn and the foliage remains green through the winter, and the bulbs will not bloom if disturbed after they commence growing. *L. longiflorum* is not as hardy as many of the other varieties, from the fact that the bulbs are liable to start in the fall if the weather is warm. It is best to cover early with leaves and light compost, as a hard frost after the bulbs have started invariably kills them. This lily is easily transplanted.

Several years ago some bulbs were sent me in the spring from the West, and they bloomed almost as soon as those wintered in the garden. I transplanted them while in full bloom, taking care to disturb the roots as little as possible, and the next spring they came up strong and vigorous. *L. auratum* is quite uncertain, with the best of protection. I plant a few bulbs every year and count the cost as bedding plants. I think they are worth growing if I get only one season's bloom from them. I do not mean it to be understood that I do not winter any of the bulbs. What I do mean is, *L. auratum* cannot be depended upon like *candidum* and the *speciosums*.



SMALL-FLOWERED BUCKEYE (Corollas, pale yellow : Stamens, full red).

Last season my bulbs were extremely satisfactory and bloomed finely. One bulb produced two stalks with thirteen blossoms, another on a single stalk eleven, and on several six were produced. If I did not get more than two blooms from a bulb I would still grow them. All the speciosum family are hardy. *Album præcox* is a much finer white variety than *album*. *Rubrum*, *roseum*, *punctatum*, *Melpomene* and *purpuratum* are all desirable. *L. pardalinum* (sometimes called leopard lily) is fine and hardy. *L. excelsum*, bright buff, is one of the most beautiful lilies we have in cultivation. *L. Brownii* is rare and costly, and from its peculiar purple outside and the pure white waxy inside, presents a striking contrast to *longiflorum* and the other members of that family. *L. Leichtlinii*, *L. monadelphum* and *Parryi* are all fine yellow varieties. All the varieties of *L. Martagon* are good. *L. Chalcedonicum* (scarlet turk's-cap) is one of the best. *L. tenuifolium*, one of the earliest, if not the earliest, is a lovely scarlet lily with reflex petals and very slender stems and foliage. *L. pomponianum verum* is very much like *L. tenuifolium*, but it is a little more robust and blooms a little later. There are many inexpensive varieties, like *Thunbergianum*, *umbellatum* and the *tigridums*, which are showy and perfectly hardy.

I have not intended to give a complete list of lilies, and indeed I have only mentioned those which I have grown. There is no special mode of cultivation. That is, there are no conditions of soil and exposure imperative. I have seen equally fine lilies grown on high and low land. On low land they will not thrive unless the soil is

thoroughly drained, for, water at the roots or wet, heavy soil is fatal. Therefore, drain the wet soil thoroughly and make it light and rich. Remember it is not the bulb that needs feeding, but the roots beneath. If the soil is light, make it rich, and plant annuals or some light bedding plants between the bulbs, as this will serve to keep the surface cool and moist.

The *Iris*, in its many varieties, is one of the best of our hardy garden tubers. It increases rapidly and forms large clumps, and I believe all the varieties are hardy. The genus is widely represented, many countries contributing. The English, Spanish and German are as their names indicate, European. Japan contributes the best of all, *I. Kämpferi*. This iris has a very wide range of color, and some of the blooms strikingly resemble some varieties of valuable orchids. All of the family are of the easiest culture, only requiring considerable moisture. The soil that suits the iris is fatal to the lily. Large quantities are annually imported from Holland, and many are grown in this country. Except for new varieties, the home-grown are the most valuable.

Herbaceous Pæonies are reliable garden plants. I say reliable because they are never winter-killed. They flower at different seasons, so that there is a succession of bloom all through the early summer months. The whole family is very showy and especially adapted to large gardens. The foliage is bright and attractive and entirely free from insects. *P. tenuifolium* has tuberous roots. The foliage is entirely different from other pæonies, being, as the name indicates, slender-leaved. The

blooms are small and a clear, bright red, somewhat like a rose, which they closely resemble.

Gladioli are by far the most valuable of all the summer-blooming bulbs. They are easy to grow, easy to keep and exceedingly valuable for cut-flowers. If a spike is cut when there is only one flower out it will keep on blooming in water at least a week, and at a time, too, when most flowers would be entirely faded in two days at the most. I would not plant gladioli in beds for show, but planted in groups, with low or medium low growing plants, they are very ornamental. The foliage must be allowed to grow in order to mature the bulb or corm which is forming at the top of the old one, and if grown with other plants the ripening foliage is partially concealed and is not unsightly, whereas a whole bed of gladioli with the blooms cut off is anything but attractive. Water is an essential element in the cultivation of gladioli. When the ground becomes dry, water well, so that the roots beneath the bulb will be thoroughly wet. Sprinkling when the ground is dry is worse than no water at all. It is far better to stir the earth around the roots than to water any plant on the surface. It requires a large stock of patience to water a dry bed or border thoroughly, but no one ought to attempt to cultivate flowers unless blessed with a large stock of that useful commodity. If you wish your spikes to grow straight be sure and stake them early. A crooked spike of any kind of flower is unsightly. If one wants a bed for cutting, it is just as satisfactory and very much cheaper to buy a hundred or two of first quality mixed bulbs, but if only a few are wanted (as often there is not room for a bed made entirely of one kind of flowers), by all means get named varieties.

If you will look over some reliable dealer's list of named varieties for three or four successive years, you will find that each year there are a few new varieties introduced at from four to six dollars each. The year after they are put out you will observe a marked reduction in the price of some, in others not very much. The difference is generally in the habit of the bulb; some are of robust growth, others are weak. The strong bulb will produce from two to four spikes of bloom, and each spike represents a bulb forming. The weak grower will give one spike, and perhaps exhaust itself and make a very small bulb; consequently the strong variety becomes cheaper, because it increases so rapidly, and for various reasons the weak grower is retained and the price keeps up. The prolific bulbs are the ones that are desirable, and some of the finest exhibition varieties are comparatively cheap, and many desirable sorts are very cheap. Eugene Scribe and Mary Stuart, pink; Meyerbeer and Phœbus, scarlet; Nestor and Pactole, yellow, with colored markings; Martha Washington, clear lemon color; Beatrix and La France, white, or nearly so; Leander and Baroness Burdett-Coutts, mauve; and Africaine, very dark, are some very fine varieties and not any of them very expensive. You can form very imperfect ideas from description of varieties. The best way, if you are uncertain, is to go to an exhibition of named gladioli. There you will find new and old sorts, and as they are supposed to be correctly named, you can find out what

suits you best. Old varieties or those that have been shown before will, of course, be true to name, but the very new ones will have to be taken on trust until their faces become familiar.

Tuberous-rooted Begonias are very valuable in the garden. Of these the florists have produced an innumerable number, and here again, unless one wishes for a few, mixed varieties do very well in the border, but if only a few are wanted, get named sorts, as then a variety of color is assured. I think the single-flowered stand the rain better than the double, for the reason that the single shut closer and the rain cannot penetrate the blossom. Those who have grown this class of begonias will remember that the blossoms keep closed in cloudy and rainy weather. I can tell pretty nearly whether it is going to rain or not by glancing at my bed of begonias. Sometimes they seem rather undecided and are about half closed, but generally it is one way or the other. Mont Blanc is the best white variety that I have grown. Annie Laing is a very fine variety, with large, pale pink blossoms of great substance. Countess of Kingston is a very large fine scarlet. *B. robusta perfecta*, scarlet, and *robusta perfecta rosea* are Ernest Benary's seedlings and are very fine varieties. *B. Piercei* has beautiful marked foliage and bright yellow flowers. These begonias need the sun only part of the day, and for that reason are doubly valuable in the garden, where most plants require all the sun they can get. Dig the tubers late in the autumn and let them dry off in boxes. I think it does not hurt the bulbs in the least to let the tops freeze, as the bulbs are already matured and ready for their winter's rest. Store them in a cool place and do not give them any water except they get too dry, in which case they would wither. If the bulbs are kept moist they will decay, for they need absolute rest when in a dormant state. The seedlings bloom the first year if the seed is planted early enough. The seed is very fine and must be lightly covered and kept moist by glass or paper.

Gloxinias can be grown very finely in a cold-frame planted out, or by plunging the pots. I grew them last summer in a temporary cold-frame, with excellent success. The location should be the same as for tuberous-rooted begonias. My frames were left uncovered during several unexpected rains and showers. The first time I expected to see the foliage spoiled, but before the sun came out I put on the sash and covered the glass with newspapers until the foliage was dry, and they were not injured in the least. Gloxinias are easily grown from seed, requiring the same treatment as begonias. In the greenhouse they will, if started early, bloom in August or September. Mine were planted in midsummer, and, as there was no bottom heat, started slowly, and did not bloom until the following season. If they do not bloom the first season, the bulb will be of good size and easier to keep over winter. The bulbs of the gloxinia require to be kept dry when resting. Single temporary cold-frames are, I find, very convenient in the garden, as they can be put on a pile of leaves or earth, and in many gardens this is a great advantage, more especially where all the ground has to be utilized.

Some of the summer-blooming bulbs are better kept in

pots or tubs; still they can be made very effective. There are many places in the garden and about the house where a pot of *Valotta purpurea* is very ornamental.

Agapanthus umbellatum is one of the few blue flowers which is really blue. Some people take the agapanthus from the pot and plant out in the border, and it does well. *Amaryllis lutea* is a hardy variety which blooms in early autumn. Blooming at a time when yellow flowers are scarce, it is very acceptable. *A. Hallii* is also hardy and is a lovely pink variety, blooming in August.

The *Zephyranthes*, in all its varieties of pink and white, is desirable, and requires no care beyond planting out in the spring, digging in the autumn and storing in winter.

Amaryllis belladonna major, minor and *alba* are all summer-blooming bulbs. They bloom planted out in the border in August and September, and require entire rest after they have matured their foliage.

Amaryllis Johnsonii will bloom in the ground, and is kept by some people to bed out in the summer by keeping the bulb dormant through the winter.

Caladium esculantum, related to the fancy-leaved caladiums, is fine for specimen plants, or planted in groups. Large bulbs make fine specimen plants. The leaves are oftentimes eighteen inches across.

Richardia alba maculata is a very ornamental species, of *Richardia Etheopica*, our common calla. The leaves are irregularly spotted with white, and much smaller than the common calla; the flower proportionately small and has a violet throat.

Ismene calathina is a beautiful plant in the garden. The plant is fine without the flower. I think it is much handsomer than many plants that are grown for foliage only. The leaves are lance-shaped, a deep glossy green, about two and a half feet in length, and remain green until killed by the frost. The flowers are borne on a stout stalk about three feet in height and are trumpet-shaped, about four inches long, of a beautiful white, and exquisitely fragrant. Strong bulbs produce two stalks and the bulbs increase rapidly. They must be kept perfectly dry through the winter. Store them in sand and start them by giving water while in the sand. When started plant them out where they can be kept moist. *Choretis albus* is easily grown and produces a cluster of pure white flowers not unlike some of the *pancratiums*. The blooms keep in water several days.

Pancratium calathinum has flowers very much like *Choretis albus*, and they both thrive under the same treatment and in almost any soil.

The *Tigridias* are all showy and worth growing in the garden. *T. grandiflora alba* forms a beautiful contrast to *T. conchiflora* and *T. pavonia*, the two old varieties so familiar to all. It is a dead white, with deep crimson markings, and the three together form a showy group.

Milla biflora is quite new. It has slender rush-like foliage and white, tubular, star-shaped flowers of great substance, about two inches across, borne on long, slender stems; each flower-stalk has from two to five flowers.

Amorphophallus Rivieri is a stately-growing plant. The bulb grows to a very large size, and as it increases the plant enlarges in proportion. The centre throws up

a thick stalk very curiously spotted, and the top unfolds like an open umbrella with the tips turned up. The foliage is as curious as the stalk, but is a beautiful green on the upper surface and makes an elegant plant for the lawn. After the top is killed by the frost the bulb should be stored like gladioli and planted out in the spring without starting. I have seen the plant potted in August and it did not wilt or appear in the least disturbed. Apparently, as the plant had stopped growing, the large bulb was abundantly able to support it without being disturbed like fibrous-rooted plants. The roots are fleshy and have small tubers at the extremities.

Tritoma Uvaria grandiflora is a very conspicuous plant; the blooms look like spikes of flame, hence the name, "red-hot poker." It makes a great show in the garden at very little cost.

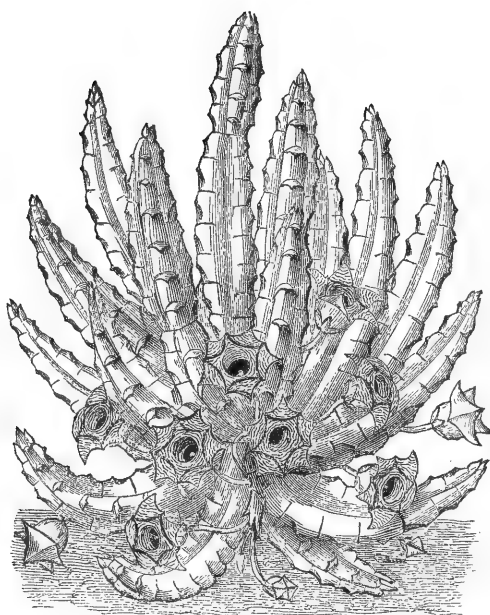
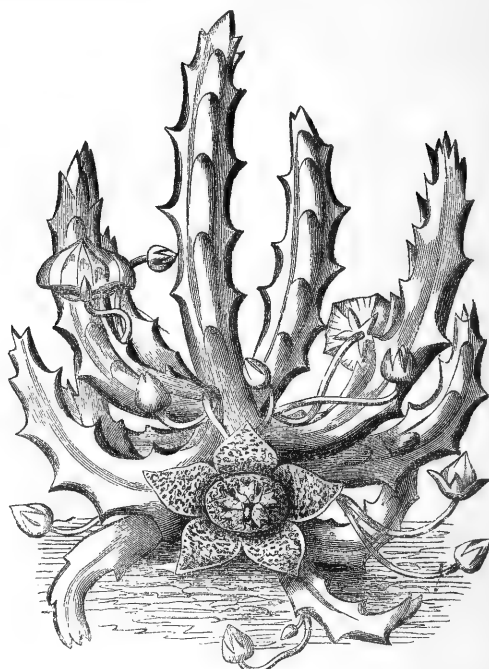
Hyacinthus candicans, a plant not unlike a giant snowdrop, with its spikes of drooping greenish-white flowers, forms a striking contrast to the tritoma.

Amaryllis formosissima is another bulb useful both for bedding and cut-flowers. The beautiful, velvety crimson flowers, combined with fine white flowers, make a charming combination for a vase. Planted out where the ground is warm, it soon starts and throws up with the leaves a flower-stalk bearing one blossom. Shortly after another blossom appears, and then the bulb matures and forms side bulbs. The foliage remains green until killed by the frost. Store the same as other dormant bulbs, being careful not to cut the foliage close to the bulb, for the bud is stored in the top of the bulb.

The *Tuberose* is as easily flowered in the ground as any other bulb, as it takes about four months from the time of starting to bring it into flower; it must be started either in a hot-bed or in a greenhouse. If you have neither of these, plant out the bulbs in a sunny place when the ground is thoroughly warmed, and after they have started give plenty of water. If the frost is late they will bloom in the ground, but it is better to pot in good soil when they are well budded and let them stand a few days in the shade. Afterwards give them the sun and keep well watered. If the weather holds warm leave them out of doors, but in case of a cold snap take them in. We generally have a few chilly days with light frost early in September, just enough to chill tender plants, and then there follows warm weather.

Tuberose are very easily chilled, but if they are protected during the cold weather they can be left out to bloom. A high bed of autumn leaves with a few inches of soil on the top and a temporary frame with sash gives heat enough to start many kinds of plants in spring, and tuberose start readily in the gentle heat. Place the bulbs in a shallow box, close together in good soil, and you will find them finely started with a mass of roots all ready to bed out. By getting a month's start in this way, they will bloom in August. I shall touch lightly on the *Dahlia*, although it is a very important member of the tuberous family and is in all its glory when cut down by frost. The only drawback is, it requires so much room to grow it. Still there are places where such plants are very much needed, and the pompons and single varieties are especially desirable.

MRS. T. L. NELSON.

STAR-FISH FLOWER (*Stapelia Huernia Thureti*).STAR-FISH FLOWER (*Stapelia variegata*).

THE STAPELIA.

THIS very singular genus of plants is well worthy of cultivation, not in the sense in which we would cultivate the rose, the lily or any other flower that combines beauty and fragrance, but because it furnishes so much food for thought. Its star-shaped flowers, so peculiarly marked, are indeed very beautiful, notwithstanding the fact that the casual observer would pass them by unnoticed when in search of such as dazzle the eye with their brilliant colors. The offensive odor the flowers emit is nothing against their attractiveness. This has its use, and the grower will never be more interested than in searching it out. Any plant that will set us thinking as well as looking performs a double mission, or rather, a real mission. Eye gratification is like the skin of an orange, a pleasing covering to the delicious fruit it conceals. A plant's real beauty consists in its uses, the object for which it was brought into existence. Plants were created for a purpose; each has a separate individual work, and when we find out what its mission is we have discovered beauty that color and fragrance cannot approach.

All the stapelias are natives of the Cape of Good Hope, and are easy of culture with proper management. The general cause of failure arises from trying to grow them when they should be at rest, and the reverse. During winter they should have all the light and heat that can reasonably be given them, but keep them as far as possible from the pipes or flues of the greenhouse. In the living-room, put the pots on brackets above all other

plants. During the summer put the pots out of doors in a sunny situation, and give them no further attention until the middle of September, when they should be brought in. Do not water until they commence growth.

It is best to strike fresh stock annually; this is easily done by taking the branches off at a joint, which prevents their decay; let them remain on a shelf a few days, then insert in a pot of sandy soil, water thoroughly and expose to the sun and they will become well established in about three weeks. Cuttings should be made in April or May.

There is a large number of species, and all are worthy of a place in the window-garden; the two following, the subjects of our illustrations, we consider the most desirable.

S. Huernia Thureti.—This is a very dwarf, singular little plant, which has pale-brown striped flowers that are quite glabrous. Its stems have a curious habit of burrowing in the ground, and then rising again.

S. variegata.—This, the most common kind of stapelia, may be easily cultivated in the greenhouse or living-room, and for beauty of coloring and finish of structure few plants surpass it, especially when seen under a strong magnifier, and were it not for the disagreeable odor the flower emits it would become a general favorite. This, however, should not prove a fatal objection, as we stated at the commencement of this article, for it will doubtless be removed as the flower or plant becomes fashionable.

SOME NEW AND DESIRABLE PLANTS.

MONTBRETIA CROCOSMIÆFLORA is a hybrid between *Montbretia Pottsii* and *Crocus aurea*. A single plant was mailed to me two years ago; it was bedded out and grew rapidly. The foliage is similar to the gladiolus, but more compact and fan-shaped in growth. It threw up three spikes, each bearing nearly a score of brilliant orange-colored lily-like flowers. I kept the roots in the cellar over winter, and in the spring divided them into twenty parts and set them out in two clumps. They bloomed freely all summer, and were very attractive. When taking up the plant the first autumn I separated three of the new shoots from the main root and potted them. These died, so I concluded the best way was not to divide until spring. If I realized so many from the one root, what may I not expect in the spring from a score? You will thus see how rapidly they multiply. Two years ago the price was one dollar, now the same firm offers the plants for twenty cents each. Of the several varieties, *Pottsii* is the best known; *elegans* is more dwarf, color yellow, the base of the tube vermilion; *sulfurea*, yet more dwarf and bushy, sulphur-yellow; *pyramidalis*, so named from its habit of growth, is a bright apricot shaded with salmon; this variety is quite rare; *aurea*, brilliant golden yellow, free flowering. Owing to the great demand for it in England it is scarce in this country. The last two are priced at fifty cents each.

A Western paper states that *Freesia refracta alba* is offered as a novelty by certain florists and priced at seventy-five cents for a single bulb. While it is true that these lovely flowers are not well known and extensively grown, it is not true that they are new. We could give the address of several florists who catalogue them at twenty-five cents per bulb, and this seems a high price for such small bulbs. Two varieties are offered, *Leichtlinii*, white, with a small yellow drop on one lower petal, and *refracta alba*, pure white. The former is best known, and can be purchased for eighteen cents. Both have long been known, but to a limited extent. The flowers are lily-shape, grow in clusters of five or six on a long slender stem, and have a very delicate fragrance. I have a pot of them now in bloom, and eleven flowers are open to-day. A lady, comparing them with the spikes of pink and white hyacinths growing beside them, says: "I think the freesias are the prettiest, don't you?" I could not say yes, for each has a beauty and fragrance exclusively its own, and to me the blossoms are equally attractive. I planted eight bulbs in a six-inch pot in November, and they have only been in bloom a few days. If one desires them to blossom earlier the bulbs must be planted accordingly, allowing about ten weeks for them to come to maturity. The foliage is long and narrow. After blooming let them gradually dry off, and when the foliage is dead take up the bulbs and pack them away in a dry place until wanted to plant again.

BEGONIAS.—The begonia is rapidly and deservedly coming more and more into general favor. We believe the time is not far distant when it will supplant to a great degree the popular geranium. And is it not worthy of a higher rank? Combining, as it does in most varieties, beautiful foliage with free blooming qualities, and as well adapted for bedding out as for pot culture, why should it not come to the front? Begonias are not fussy plants, demanding special soil, position and petting in order to thrive. They are healthy and free from pests, as a rule. There are a few on which the aphid thrives indoors, but we have never had any trouble with them in the border. The handsomest plant in my window is *B. metallica*. Its habit of growth is very fine, and its shining bronze leaves with darker veins are very ornamental. Its flowers are white, covered with red hairs. *Margaritæ* is a hybrid between *metallica* and *echinosepala*, and resembles both parents. We do not think it equal to the former. We had, among others new to us last year, and indeed, belonging to a new class of begonias, *Tenscheri punctata* and *T. maculata*, also *Semperflorens gigantia rosea*, a hybrid of a strong vigorous growth, large foliage, flowers rosy carmine. *Diadema* is a new and rarely beautiful begonia sent us last year by John Saul, of Washington. It is quite unlike any other that we have seen. The leaves, which are deeply lobed, are of a delicate green color, marked thickly with irregular elongated blotches of white. They have a silvery lustre. *Sunderbruchii*, "the finest ornamental-leaved variety extant," it is said, is somewhat after the manner of *ricinifolia*, with its large palmate leaves, but more toothed; the surface of the leaf bright metallic green, with veins marked and broadly shaded with black. Bears large panicles of pinkish-white flowers. *Discolor rex* is a highly ornamental begonia greatly resembling the rex varieties. *Semperflorens elegans* is a new variety which "attains a height of twelve to fourteen inches, and is a compact mass of medium-sized, glossy olive-green leaves, and blooms so freely that it presents the appearance of a fine bouquet. The flowers are of a rosy flesh-color, shaded with bright rose, and enlivened with dense clusters of yellow anthers. It blooms continually, but is freest in the winter." *Obelia* is another of recent introduction: "The leaves are somewhat ovate and deeply lobed, the lobes being very obtuse in shape. The veins are sunk; the raised portions are marked with silvery blotches." The last two being novelties, are priced at one dollar. Well-known or older varieties can be purchased for ten or fifteen cents each. We have had two varieties of the tuberous begonias, and can recommend them as admirable for summer blooming. Bedded out they are constantly in flower. The varieties, both of double and single tuberous begonias are very numerous, and they must be dried off and allowed to rest during the winter months.

M. D. WELLCOME.

A WINTER WALK.

THERE is a charming variety in our winter landscape, and a walk through the fields and woods brings new combinations to the eye on every side; the deciduous trees are brought out in bold relief against the sky or an evergreen background, and each one stands on its own merits showing a rough and rugged trunk, with twisted and knurly branches, or smooth and polished bark, and gracefully drooping sprays, all stripped of their dress of foliage.

In summer, the white pines, with their soft and mellow color, blend beautifully with the surrounding green, but in winter they form bold masses of dark green, a background for many a graceful form and noble outline of bare trunks and branches.

The pitch-pine is a rough and uncouth tree, but in groups and masses it brightens up our winter landscape, and with its irregular outlines and cheerful yellowish-green, the stiff and formal groups of brown cedars, dark-colored white pines or hemlocks are made more pleasing to the eye.

The young hemlock is the most graceful of all our New England evergreens, with its feathery sprays of dark-green, drooping at the tips, but as it grows in size and pushes out its horizontal branches it takes on a more compact and rounded form, and a dark, unvarying shade of green.

To the North, the spruces and firs form a prominent feature in the landscape, and largely supersede the pines in some localities. We miss the pitch-pine and its cheerful color; the woods are more sombre but not without variety, for the white and black spruces are both varied with yellowish and bluish shades, and the symmetrical fir is darker than either, and stands out prominently against them.

Along the rivers the paper or canoe birch stands in bold relief on cliffs and rugged ledges, outlined against the sky, or with an evergreen background, bending over the streams and reflected in their mirror-like surface, while in the woods it stands white and rigid amid its dark surroundings like a sheeted spectre.

More widely distributed is its graceful sister, the white birch. The staring whiteness so conspicuous in the canoe birch is relieved in this by patches of dark color; the branches are finer and more gracefully drooping. It has a character of its own and will not part with it; even in a clump of several trees sprouting out of a single stem, each one holds its own form. Standing among other trees we find the black and yellow or gray birch, with roundish heads of slender, bronzed branches and dark-brown, yellowish or silvery gray bark hanging in ragged sheets and flakes from the trunk like a great, shaggy coat.

The river birch has graceful reddish branches and shaggy red bark; this, too, is vain of its charms, for it clings to the banks of streams, where its form may be seen in the waters below.

Who can do otherwise than admire the leafless outline

of the graceful and stately elm of our fields and roadsides towering above its surroundings, a king among trees; or the rugged oak, a type of strength and endurance, standing like an athlete with muscles bared, ready to defy the storms and winds of winter?

The hickory has a finish, grace and strength of its own, with a dark and rigid, tapering trunk, symmetrical head, without a formal outline, and with branches smoothly finished and gracefully curved.

The tupelo is a striking tree, with grayish bark and horizontal branches when young, sweeping downward from a short bend at the trunk as the tree becomes old, and then flattening out at the top; it is an interesting object in swamps among maples and rough swamp oaks.

The maples, with their rounded heads and gray bark; chestnuts, dark-colored and symmetrical; the hornbeam, with its regular top and fine spray; the conical basswood, light-gray beech, dark ash, grayish-green poplars and shining-bark cherry all help to make up a charming variety in winter landscape, but it is not in the landscape alone that we will find attractions.

A walk in fields, swamps and woods when the ground is bare will bring to our sight many treasures unnoticed or covered by the summer abundance of foliage.

The fields look brown and bare, yet there are the most delicate tufts of leaves with bright colors if we search for them. The most insignificant pinweeds or *lecheas* and wild St. John's-wort have little tufts of trailing stems crowded with glossy and brightly-colored leaves in shades of green, red and purple, and there is quite a variety of them.

We find, also, beds of gray and red-tipped lichens and green and brown mosses, and along the stone-walls the glossy leaves of the evergreen dewberry in trailing masses of rich purple, broken now and then by barberry bushes, brilliant with clusters of red fruit, holding on late into the winter, and beds of trailing juniper in many forms and purplish shades, covered with blue berries, and dense tufts of the bayberry, its branches clothed with waxy, white-coated fruit.

In the meadows there are dwarf evergreen shrubs—*andromedas*, *kalmias*, *ledums*, with brown, purple, light and dark green leaves. If we examine them closely we will find the flower-buds already formed, and on the alders countless hanging catkins, all ready to burst open in the spring.

Pick a bunch of these buds, take them home and place them in water in a warm place; you can force them open and have a charming suggestion of spring long before its time.

The deciduous shrubs make very pretty groups here and there on the edges of and in the wet lands.

The gray-barked poison dogwood (*Rhus venenata*), with its many hanging bunches of cream-colored seeds, and near-by the black alder, with its brilliant scarlet berries, brighten up the subdued colors of the surroundings

long into the winter. Growing with it we find the high blueberry, with bright-red young twigs. They hold this color but for a year; then grow wrinkled, rough and gray, and another growth takes their brightness.

The *Andromeda ligustrina* holds its brown masses of seeds for a year and makes a variety in color, and the cornels add brightness; the silky cornel (*C. sericea*) has a reddish-purple bark on the new growth, and the red-osier dogwood (*C. stolonifera*), a bright crimson bark. The latter shrub forms broad-spreading masses and brightens up its surroundings wonderfully. Climbing over these shrub-groups are the stems of the virgin's-bower (*Clematis Virginiana*), with its feathery balls of seeds still clinging to the branches, and the greenish stems of the deadly nightshade, loaded with scarlet berries, or the bitter-sweet, with yellow and orange bunches of fruit.

Under our feet the meadow mosses show patches of bright color, shades of yellow and cream, pinks, dark reds and brown and the purple-leaved cranberry traces a delicate network of color over them, with the bright-red fruits for ornament.

Go from the meadows to the woods and we will find many attractions there.

Covering black and decayed stumps and rough gray

stones are patches of moss of wonderful variety and delicacy, ready to burst into growth every sunny, warm day. We find the partridge-berry (*mitchella*) tracing figures on a canvas of green moss, with their two-eyed scarlet berries like jewels in a dark-green setting.

In open places are beds of purple and green leaved checkerberry plants, with a load of coral bead-like fruit; in shady places the evergreen *Aspidium acrostichoides*, with its dark and glossy fronds, and in crevices and shelves of ledges the ebony spleenwort, with polished stems and pretty fronds, or its more delicate sister, *Asplenium trichomanes*, with its little tufts of narrow and gracefully-curving fronds.

Among the hardwood leaves are charming tufts and mats of the rattlesnake plantain, with its velvety-green leaves so delicately varied with white, as fresh and green in midwinter as in the sunny days of June.

There are pipsissewas dark and glossy, pyrolas in variety, with dark and light shades, and the evergreen lycopodiums. You will come home knowing that the woods and fields are not all dead or sleeping. Your cheeks will be more rosy, your step more sprightly and your hands overflowing with woodland treasures as charming as the flowers of summer and far more lasting.

WARREN H. MANNING.

AS YE SOW SO SHALL YE REAP.

THIS saying is as wise as it is old, and like all wisdom has a broad significance. It is one of those peculiar figures of speech that will apply in a truly practical way to all kinds of business. But nowhere is its application more pertinent than to the seed trade.

The dissemination of seeds is an important industry, and one that materially affects both dealer and consumer. Fortunately the interests of both are mutual. If the seedsman sends out good seeds he enables his customer to secure good crops, and in return derives profits from future sales to that customer and all others whom he can influence. To sell poor seeds, either as regards stock or germinating qualities, is the worst possible form of swindling, as the loss and disappointment are so great in proportion to the amount of money invested. For example take the following: A farmer buys seed for a crop of cabbage; he pays one dollar for the seed, expecting, if the conditions of growth are favorable, to realize from the sales of his crop two hundred dollars, after paying for his fertilizers. This would be a fair return for his labor, farm rent and incidental expenses. Should the seed prove other than he supposed he bought, and if it should turn out to be an inferior strain, he would lose from one-fourth to three-fourths of his crop, and what he could secure would be of an inferior quality, and the grower would have no return for his labor. The same rule will apply to all other kinds of seed sold to farmers and market gardeners.

The disappointment resulting from worthless flower seeds is quite as great as that from poor vegetable seeds,

although the pecuniary loss may not be as great. But this loss of money is by no means the one that is the most severely felt, for it can be made up by some other industry, but when our hopes of beautiful flowers do not ripen to fruition, we suffer a loss that cannot be made good. Almost everyone that cultivates flowers has a hobby which is not satisfied until every sort that goes to satisfy that particular hobby is obtained. One makes the gladiolus a hobby, and must have all named varieties, and will have them without regard to cost. Now, when a new sort is announced, it is obtained, and if it proves an old variety under a new name, or one not true to name, its loss will be mourned over for a year, and the one that sold the bulb has curses loud and long heaped upon his head. The dealer has sown tares in his own garden (business) and has reaped a bad name.

Complaints of poor seed come to us from every quarter, and we are asked, "Where is the fault?" We reply, in a great measure the cheat is the one that gets cheated. The principal cause of poor seed is the desire and willingness to buy poor seed, which is a synonym for cheap seed. Seed-growing is one of the most particular branches of horticulture; in order to secure a stock of good or superior quality, the utmost attention must be paid to selection. Everything that does not come up to the desired type must be discarded, even though it takes the whole crop, as is not infrequently the case. This makes seed-growing a difficult and expensive business—one requiring constant care and attention. Therefore, when the best results in seed-growing are attained, they

are attended with very great expense—at least four times, in many cases, as much as seeds of an ordinary character would cost. Consequently they bring a correspondingly high price in the market. Now, when dealers whose reputation has become well established make up their price-lists, it is but reasonable to suppose that they are doing, in way of prices, what every one must do in order to make his business successful. They sow good seeds, reap a fair profit, and the consumer is usually satisfied.

In opposition to this class there are to be found other dealers who wish to build up a trade and with it a fortune by selling cheap seeds—not seeds cheaply. These dealers take whatever is offered for stock and have it

grown by farmers who do not understand the first principles of seed-growing, paying them about the same price as for ordinary farm products, and this is thrown upon the market, advertised as the best, “with great inducements for clubbing.” We do not question the intentions of this class of dealers, but we do know, from practical experience, that it costs more to grow first-class seeds alone than the amount for which they are frequently sold, without taking into consideration the cost of selling, which, in a retail business, is more than the cost of the seeds. We therefore say that if you sow cheap seeds you will be most likely to reap a crop of disappointment instead of one of pleasure and profit.

BOUQUETS AND BOUQUET MAKING.

“UPON deliberation,” says a wise observer, “our first and our last thoughts will be found to coincide.” The florist’s art illustrates this aptly enough. Although we may for a time fall into the hands of those Philistines who torture the poor flowers into such eccentric forms that Flora herself could scarce recognize her offspring, sooner or later we return to first principles and with them the simple, harmonious arrangements that pleased our childish beauty-loving eyes.

It would be an interesting matter to trace the evolution of the bouquet, from the primitive cave-dweller who first plucked a handful of prehistoric flowers to the ingenious but misguided mortal who first built a formal bouquet. However, those fearful and wonderful bouquets made after the design of old-fashioned Brussels carpet are now rarely seen save in the remote provinces. Still, the florists were not to blame for the tasteless formalism too often displayed in their work. It used to be the idea—it is still with many—that a florist’s bouquet must be a peculiarly and distinctly artificial production. They did not want a loose and graceful nosegay, such as they might have put together themselves. So artificial stems and artificial arrangement came in fashion and the poor flowers, cramped and swaddled like an Indian baby, were finally adorned with a paper frill, like a Melton Mowbray pork pie. “Angels and ministers of grace defend us” from a revival of the like, now that nature is once more in fashion. The hand bouquet of the present age is a loosely artistic bunch, apparently tied together with a ribbon bow. I say apparently, as, of course, each flower is secured in place before the ribbon is put on. The flowers are on their own natural stems, and very rarely are these [stems] hidden by any cover or holder. Of course, it is in reality much more difficult to arrange flowers in this way than in the old-fashioned besom-like structure, the original model for which was, we presume, a prize cauliflower. In the latter case manual dexterity was the one thing needed; in a modern bouquet the florist must have the eye of an artist. Remember the bouquet Mr. Black’s “MacLeod of Dare” bought in Covent Garden; there was a bright red rose in the centre of a mass of white, broken only by a

ring of dark purple. In spite of the novelist’s exquisite taste in most matters we cannot reconcile such an arrangement to our æsthetic conscience. Since the hero’s fate depended on a red rose, why couldn’t he present Gertrude with a loose bunch of glowing Jacqueminots, set only in their own graceful foliage? That is our ideal bouquet, and although roses will combine with anything, they are never so charming as when, without any other flower, they are arranged with their own leaves. A mixed bouquet is very apt to be an abomination, and two, or at the most three, sorts of flowers are sufficient with feathery ferns or asparagus for draping. Roman hyacinths, Parma violets and mignonette make a charming combination loosely tied together with white ribbon, and the accompanying corsage bunch should be a long, drooping cluster of the same flowers, garlanded with *Lygodium palmatum*.

It seems an impossibility to give any cold-blooded directions for making a successful bouquet, as one might give a recipe for charlotte-russe. Cooking is an exact science, whereas bouquet-making is not; you may have the right materials, but success will be lacking, unless, like Sir Joshua Reynolds’ colors, you mix them with brains. We think the test of a florist’s genius is a bridal bouquet—a simple harmony in green and white. To make this graceful and harmonious, without the least suggestion of a funeral design, is a more difficult matter than one would think. During the period of set bouquets, Niphetos roses, white azaleas and stephanotis, draped with adiantum, took the lead. Lord Beaconsfield makes one of his brides carry an immense bouquet of *stephanopalis* draped with filmy ferns; charming, no doubt, but a little obscure botanically. The time-honored orange blossom, with its own shining leaves, will form into a graceful nosegay, though not a very showy one. It is prettier in combination with something else; roses, perhaps, or the delicate little *Odontoglossum Rossi majus*. This, by the way, is one of the prettiest orchids for bridal use, as the majority of the white ones are almost too heavy and waxen; they do not look bride-like.

This season very young brides carry a bunch of lilies-

of-the-valley, draped with ferns or asparagus, showing, perhaps, the merest suggestion of their own tender leaves. Or they may use fragile-looking paper-white narcissus and Roman hyacinths, leaving orchids for their more mature sisters. Cloudy-looking stevia may lighten any of these heavier flowers; it is an unassuming little flower, but one of the things no well-regulated florist should be without.

Just at present, say those canons of decorum, the society papers, it is not correct for a young woman to be loaded with flowers at reception or ball. She must be content to carry a single bouquet; quite a contrast to a winter or two ago, when the *débutante* was laden with flowers on the same principle that the Indian warrior displays his scalps, since they were supposed to represent her conquests. This flower-tax was quite a serious matter to an impecunious young man, so we may reasonably conclude that the change in fashion is largely due to economic reasons.

Positively, there is now little difference in appearance of design between corsage and hand bouquets, save that the former must present a flat surface for the convenience of wearing, while the latter has a good all-round effect, as our British cousins say. In either case roses should be mixed with no other flower if we wish to produce a really harmonious whole, unless the merest touch of stevia or some other fine and unobtrusive flower be used as background. Of course mixed bouquets are made successfully, but it is a question whether they can be called more than merely pretty; they are certainly not as artistic as a rich cluster formed of one variety. The fine hybrid roses certainly lose by combination unless very carefully treated. At one time it was in vogue to manufacture bouquets of which one-half or section was a solid mass of one flower or color with the remaining portion in vivid contrast. It possessed the same relation to the florist's art that ribbon-bordering does to gardening—highly ingenious, but æsthetically a monstrosity. Jacqueminot roses and Miss Joliffe carnations we have often seen combined in this manner; not a very happy combination, for the carnation is very apt to look coarse or heavy when placed too closely to the rose. But the carnation is not by any means to be despised, even when placed with flowers

more fragile than the rose. We have before us now an exquisite bunch of white carnations, white azaleas and feathery asparagus; it is simple, but effective and delicate in the extreme.

We spoke last month of the use of variegated foliage in bouquet-making—a very original and desirable innovation. The crotons offer such an infinite variety in this direction, shading from palest gold to gorgeous orange and crimson, with all the oddities of form imaginable. They are like grotesquely contorted ribbons of brilliant hue, and accommodate themselves very kindly to the florists' use.

Of the orchid bouquets we have spoken before; they are loosely formed, with only a scant admixture of some fine flower to relieve them. For the corsage, a single spray—even a single flower, in some cases—is worn, with a slight draping of green. The immense corsage bouquets worn during the past two or three years have produced the natural reaction, as in the case of funeral flowers, and many women of undoubted taste now content themselves with wearing a single rare or costly flower.

We have never seen mentioned the use of *Anthurium Scherzerianum* in bouquets, though it is most effective in table decoration, attracting much attention both by its odd form and flaming color. It would make a very novel bunch or a striking garniture for a black gown.

It seems as if we have said everything about a bouquet except how to put it together. "Ay, there's the rub." You may describe an artist's method of work, his colors and his canvas, and also the effect of his finished work; but who can describe each stroke of the brush? So in bouquet-making; we may tell you what to use and what to omit, but success, or the lack of it, depends on the maker. Use and its accompanying dexterity does much, but the artist faculty must be born in one. Canon Hole says that he who would grow beautiful roses must have beautiful roses in his heart. So with the florist; he who makes beautiful bouquets must think beautiful bouquets, and must produce the finished form mentally as well as materially—he must arrange his flowers with brains.

E. L. TAPLIN.

POINSETTIA PULCHERRIMA.

FROM my earliest recollection of cultivating plants I had the greatest desire to possess one of these gorgeous flowers, although I knew very little of them except the information I obtained from the various catalogues that came in my way. But having read also in many floral journals that it was almost an impossibility for an amateur to succeed with the poinsettia, the delight of possessing one of my own remained for many years in anticipation. But now I no longer anticipate, for possession is really and truly mine. And the plant is beautiful. It fairly fills the window with its flaming bracts, looking down in its regal splendor on the more unpretentious

plants beneath it, a very king in its superiority. And now let me add that anyone can raise the poinsettia who can cultivate a plant at all. I procured a small slip two years ago, inserted it in sand under glass at first, but found it, at the end of three weeks, without a sign of rooting; then I gently removed it to a shady spot in the flower-garden, where the ground was quite moist, suitable for the growth of pansies, and left it for several weeks more, and upon going to look at it one day I found, to my unbounded delight, that it had made rootlets almost two inches long. Without disturbing these any more than was absolutely necessary, I carefully

potted the slip in a four-inch pot with very rich soil, and its steady growth was uninterrupted. In September I repotted into a six-inch pot in similar soil, kept it growing steadily, and now, the second year of its growth, it is rewarding me for all my care. The blossoms are inconspicuous, but are supported by these beautiful bracts of such a vivid scarlet that one rarely thinks of the flower.

Blooming, or rather coming, as it does in midwinter, just at the holidays, and remaining for full two months and more, it is well worthy a place in any window. What a grand sight must be a greenhouse filled with these plants. The great obstacle to their successful culture in the window-garden, as urged by most writers, is the great necessity of their having plenty of heat; being decidedly tropical in their natures, a chill to them is very

injurious. This difficulty is readily overcome when houses are heated by furnace or steam, but where heat for a bay-window is dependent upon a common heating stove, using wood as fuel, the case is different; some measures must then be taken to insure a regular heat through the first part of the month of November. At night, before retiring, I simply placed a kerosene-lamp beside my cherished plant, and put an extra piece of wood in the stove, then retired to peaceful dreams. It is absolutely necessary to keep the poinsettia warm during November, while the plant is laying the plan for its future beauty. I gave weak stimulants just before blossoming and after, with excellent results. I feel pleased with my success, and hope others may be induced to try the culture of this regally beautiful tropical plant. M. R. W.

THE VEGETABLE GARDEN.

ASPARAGUS CULTURE.

I PRESUME that all of the readers of THE FLORAL CABINET are familiar with the early spring vegetable known as asparagus, and I am of the opinion that it would be found in every amateur's garden if it were not for the general idea that it is a very difficult vegetable to grow. Now, this is a great mistake, for although the asparagus prefers a moist, sandy soil, yet it can be grown in any soil or situation if properly cared for.

Asparagus is usually grown in what are termed beds. These are generally formed by setting out during the fall or spring months one or two year old plants, which can be procured for a moderate price of any seedsman or florist. Persons can raise their own plants from seed if they desire to do so, but in preparing new beds it is a decided gain, as well as a great saving of time and trouble, to procure roots two years old.

To obtain the young plants, the seed should be sown as early in the spring as possible. Select a deep, well-enriched piece of ground, and mark it off into rows sixteen inches apart; sow thinly and cover with soil to the depth of two inches. The seeds should be soaked in tepid water for twenty-four hours previous to their being sown. When the young plants are well up and strong enough to handle they should be thinned out, so that they stand about three inches apart, and during the summer they should be kept well cultivated, clean and free from weeds; and if the work has been properly done the plants will be fit for use the ensuing spring, although it is preferable to allow them to remain another season.

Now comes the most important part of the work, the formation of the permanent bed, and I here desire to impress this fact upon all—that it is useless to expect to obtain a satisfactory asparagus-bed unless this part of the work is thoroughly and properly performed. In preparing the permanent beds a deep, rich sandy loam should be selected, and this should be thoroughly trenched, burying in an abundance of manure, as no more can be applied after the beds are planted except by surface dressings. There is little danger of making the ground too rich, for the tenderness and sweetness of

the shoots depends upon the rapidity of their growth. In planting, let the trenches be opened about three feet apart; they should not be less than one foot in width and eight inches in depth. At the bottom of the trench some two or three inches of well-decayed manure should be well mixed with the soil, and on this place the plants about two feet apart. The roots should be exposed to the air as little as possible; and in planting spread out in a natural position and cover with two or three inches of fine soil. The young plants must be well cultivated at all times, and at each hoeing let a little earth be drawn into the trenches, so as to gradually fill them up. About the end of October the stems should be cut off and removed; then cover with a good dressing, or enough to fill the trenches, of manure or rich compost, which in the spring should be carefully dug in, and the plants treated precisely as directed for the year previous, with the exception of drawing the earth to the plants, as the trenches in which the plants were placed should have been filled up by the end of the first season.

The next, or third season, the shoots can be cut for the table several times, care being taken to cut all, both large and small, as soon as they make their appearance. After this the plants should be well cultivated until fall, when the tops should be cut off and removed, and a heavy dressing of stable manure given, which can be dug in around the plants in the ensuing spring. This treatment should be continued year after year, until the bed shows signs of exhaustion, when another bed should be prepared to take its place. In gathering the crop, care must be taken not to injure the plants by cutting too freely. They can be cut with safety from the time the shoots make their appearance until the first week in June; after this, cutting should cease as soon as the shoots commence to show signs of weakness, when all should be left to grow. The only variety worthy of general cultivation is Conover's Colossal, which throws up from twenty to thirty shoots over an inch in diameter and of a pale green color.

An application of superphosphate of lime is very bene-

ficial to this crop, and it is best applied as a spring dressing by being scattered on the beds and worked in with the hoe. Asparagus is also greatly benefited by an application of salt, which can be given at any time during the spring and winter months; four or five pounds scattered over a square yard will be none too much.

In the cultivation of asparagus it should be borne in mind that the plants are gross feeders, and there is no danger of giving them too much manure—in fact, the ground cannot be made too rich. Good stable manure is best, but superphosphate of lime, Peruvian guano and the blood and bone fertilizers, are all good and can be applied generously. Even the scrapings of the rich earth of the barnyard, or where a manure heap has been permitted to remain for any length of time, are of benefit to this crop, and should be employed whenever the opportunity offers, covering the bed at each time to the depth of three or four inches.

CHAS. E. PARNELL.

DANDELIONS.

The dandelion (*dent de lion*, lion's tooth), *Leontodon taraxacum*, Linn., is a perennial-rooted plant, common throughout Europe, whence it was brought to this country, where it has become well naturalized. When found in meadows, pastures or lawns, dandelions are properly called weeds, *i. e.*, plants growing where they are not wanted; but when they are given a place in field or garden and brought under cultivation, they may properly be classed as vegetables.

We who have lived in the country in our youth well remember the delicious greens gathered in early spring. There were dock, plantain, milkweed, etc., but chief and best was the dandelion, whose young leaves were prized,

not only for the gratification of the palate, but for their medicinal value, as they were believed to have a beneficial effect on the liver and digestive organs.

Dandelion roots cut in small pieces and roasted were sometimes used in place of coffee, but oftener mixed with coffee, giving a peculiar taste that many preferred to that of the coffee alone.

The slightly bitter taste of both leaf and root is owing to a principle called *taraxacin*, which in various forms is employed in medicine as a tonic and diuretic. Of this the root contains the most, but there is sufficient in the leaf to render it serviceable when used as food.

Dandelions are so easily raised it has always seemed strange to us that they have not oftener found place in our gardens. Beds can be readily made by transplanting young plants from fields, or by raising from seed. If transplanted it should be done while the roots are quite small, for when they are well established they are moved with difficulty. If it is preferred to raise them from seed it should be sown in May, slightly covered and well pressed down in drills fifteen inches apart, and the plants thinned out to stand from ten to twelve inches apart in the row. This for garden culture; for field culture the rows should be far enough apart to allow them to be easily cultivated. The next spring the leaves may be picked, leaving only those forming the heart or centre of the plant. New leaves will grow and may be picked during several months. Many people use the young leaves for salad. Some object to the use of dandelion as a vegetable by itself on account of the bitter taste; such will probably prefer a mixture of dandelion and beet tops, which is certainly very desirable.

L. A. R.

FROST FLOWERS.

A VIGOROUS rattling of the grate, and a few disconnected words uttered in an equally vigorous tone of voice, floated up through the open register to Daphne's ears as she finished dressing, her teeth fairly chattering with cold.

"I declare I never knew it to be so cold in this room! Dear me, the water is frozen too, the cold wave has struck us at last, surely. Now, what in the world is the reason Tom is smashing things 'round so, downstairs?"

A patter of feet down the stairway, then the door swung to and Daphne spread her little blue fingers out toward the stove, wondering why it should be so cold, and why there should be such a litter of shavings and kindlings, when Tom came in and tossed some more wood into the stove, slamming the door with a force which sent a whiff of ashes afloat in every direction.

"It is just awful cold, Tom!"

"Oh, is it? Well now, I'm ever so much obliged for the information; how long since you made that interesting discovery?"

"I wish you wouldn't make such a litter, it really doesn't seem to me that there's any need of it."

"Course there isn't! If you came down and found the fire all out and everything frozen solid, you'd pick out a shaving and a half, and after having carefully arranged it, you would pile on the kindlings with equal care, I suppose," and another stick went in with a slam.

"I wouldn't talk as you did; I heard a word or two now and then and I know you didn't talk very properly. Besides, I should think you'd be ashamed to be so cross just because the fire went out; you could have stayed in the kitchen while this fire was starting," and with a most superior and dignified look Daphne opened the door and passed out.

The kitchen she found to be a few degrees colder than the sitting-room, so she came back. Tom looked up and inquired if the temperature was so torrid she couldn't bear it, and hovered a little closer over the stove.

"How did it happen that both these fires should go out, and such a cold night too? I don't believe you took care of them properly when you came home last night."

"Course I didn't. I never do anything properly. Say Daphne, did you know I was to blame for the Flood?"

But Daphne declined no reply, and at once began her

preparations for breakfast, while neither spoke again until the meal was ready. Daphne sat straight and stiff and poured coffee, while Tom sat straight and stiff opposite, each using the utmost politeness in speaking when it was absolutely necessary.

When it was nearly time for Tom to go to the store he even buttoned his overcoat before saying anything, and Daphne's poor foolish heart sank nearly into the trim little boots which Tom had brought home only the day before, but she made no sign and kept on clearing away the breakfast dishes as though there was nothing else in the world which occupied her mind at that precise moment. Tom took his cap from its peg and stood irresolute an instant, then the pretty monogram inside—the work of Daphne's dainty fingers—caught his eye, and tucking the cap under his arm he called, "Daphne!"

"Yes, sir," and she stood demurely, just in the doorway, "did you want anything?"

"Stuffy little minx, she deserves a shaking!" thought Tom; but the pink cheeks and dewy eyes caused his heart to relent and he said:

"Only to have you look at these beautiful frost-flowers here on the window."

Well enough she knew that was only a ruse to lure her over to the window, where he would kiss her and "make up," but she wanted him to say first that he was sorry for having teased her; so she answered in a very dignified manner: "I haven't the time now, thank you; and, judging from the temperature of this room, I can look at them at my leisure during the day."

"Yes; you will have to thaw out considerably before any fire will make an impression where you are. I never knew before how much your disposition depended for its sweetness on —" but Daphne was gone. Tom waited a few minutes, half hoping she would return, then clapping on his cap he started toward the door. Daphne, anxious for a reconciliation, had reached there first by going another way, and was now giving her whole time and attention to rolling up the hall-mat preparatory to shaking it—a thing which Tom never allowed her to do, by the way. He shook the mat, laid it at her feet and, lifting his cap, bowed in his most killing manner, said "Good morning," and was gone. Then Daphne locked the door, seated herself in a miserable heap on the rug in front of the now glowing fire, and cried until her eyelids were swollen and smarting. Then, as a shower in summer clears the air and makes the returning sunshine even brighter, so her tears washed away her vexation, and, rising, she said: "O dear! I was a little dunce, but I'll go this instant and make a lemon cream for dinner and we will 'make up;' but to think he should go away with such a cool good-bye!" and the tears broke forth afresh.

Just as everything was done for the day and all preparations made for the seven o'clock dinner, when Tom would come and all things be peaceful once more, a ring at the door called her from her musings. She found a small boy, who handed her a note, and, saying there was no reply, took himself, his very small hat, and his very

large pants out of the way. The note was from Tom and thus it ran:

Mrs. T. H. Tannant:

DEAR MADAM—I am unexpectedly called to H— on business for the firm, and shall be gone to-night. Doubtless you will be able to manage the fires more to your satisfaction and will be glad of the opportunity.

Very respectfully,

T. H. TANNANT.

"The idea, when he knows how I hate to touch a fire! I'll just go right straight home to mother, and there I'll stay till he says he is sorry."

An hour later a very resolute-looking little lady took a seat in the cars for D—; and this is the note Tom found awaiting him on his return next night:

T. H. Tannant:

SIR—Doubtless I might be able to manage the fires beautifully, but not caring to do so I have gone to mother's, where I shall be warm and comfortable and well treated.

Hoping you may have an opportunity of enjoying all the frost-flowers you care to,

I am, very respectfully,

DAPHNE TANNANT.

To find a note like this in a cold house, when the mercury in the thermometer was hunting the bulb, was not calculated to make a man feel very pleasantly I must admit. Tom had come home penitent, eager for a chance to make his peace, and stowed away in his pocket was a little peace-offering which Daphne had mentioned as so beautiful in Silvern & Co's. window a few days before; now, however, he was angry. He tossed the note down, exclaiming: "Well, if you wait for me to come after you, you will wait quite a little season!" and fell to work at the fires. While he was rattling and smashing round everything went pretty well; but after the fires were all running finely, his coffee made and disposed of, together with the very lemon cream into which Daphne had mixed so many pleasant and unpleasant thoughts that it is a wonder it didn't give him his death of indigestion—his cigar lighted, himself comfortably disposed in his easy-chair, he missed something. Daphne's kitten mewed and rubbed against his legs, and the dog kept running to the foot of the stairs, barking excitedly and running back again. He fed them, but still they refused to be comforted; so finally he made Cuddle a bed of Daphne's shawl, into which she at once nestled contentedly, and gave Spider a slipper, then everything was quiet. How still it was! What made it so still? Somehow Tom didn't like it. Into the stillness troublesome thoughts began to intrude; thoughts of the busy hands always so ready to do anything for his comfort and pleasure; the sweet, clear voice which chattered so pleasantly always; the little snatches of song; the swish of feminine draperies.

"Heigh ho! I was downright mean to the dear little thing! At home she was waited on and idolized—guess she never knew what it was in her life to come down and prepare breakfast till she married me. Spent a whole year learning everything about housework so we shouldn't be obliged to keep a girl—there, Tom Tannant, you ought to be kicked to death by cripples! If I live till to-morrow I'll go after her!"

But you know, my reader, that in this little world occasionally affairs have been known to turn out very differently from what the parties most interested would have wished; and although Tom survived till the next day, he did not go after Daphne, because immediately on reaching the store he was informed of the illness of the senior partner, so, of course, he could not be spared.

Leaving Tom to fret and worry out the day inside, while outwardly he was serene as a May morning, we will go where he would like to visit Daphne. When that young lady presented herself before her mother and announced that she had come home for a visit, Mrs. Deering at once mistrusted the reason, but being gifted with unusual prudence, she said nothing, and waited developments. Toward night Daphne began to grow restless; would start nervously at the sound of the bell, and at last, pleading fatigue, went early to her own room. Next morning she came down early, and in her old seat by a south window began diligently to work on a small painting. As it grew rapidly beneath her fingers, the family all exclaimed: "How queer! How did you happen to think of that?" Beside a window covered with flowers and ferns traced by the delicate fingers of the frost, a woman sat with head bent low on her hands; her face was concealed from view; but sorrow was expressed in every line and curve of the figure, which was Daphne's own. She only said: "It is an idea I happened to have, and I want to get it on canvas as soon as possible while I am here; the details I can put in at my leisure." The second day she finished what she intended to do, and placed it to dry; her mother watched her face anxiously awhile, then said: "Do you remember once, Daphne, when you were a wee girl, of disputing with your playmate, Amy? I said: 'Why, Daphne, you musn't do so—it is wrong to quarrel with Amy.' You turned your head one side and said: 'But I didn't *quar*l with her, she *quar*led with me!' You always fancied Amy did the 'quarling.'" Daphne came swiftly to her mother's side, and saying, "How did you know; what shall I do?" hid her face on her mother's lap.

"Send him the picture, as you intended; it will bear varnishing by night, and you can retouch at your leisure." Then followed some words of motherly counsel and loving warning, to all of which a most subdued little Daphne listened.

Just after she had placed the painting carefully in its box and tied the last string, she went to prepare for a walk to the express office, for she would trust it to no hand save her own. She heard her mother's voice as she ran down the stairs, and that worthy lady came to meet her, saying: "You must remove your cloak and bonnet, for you have a caller waiting for you."

"O dear! I didn't mean a soul should know I was at home!" she exclaimed impatiently, tossing her things on the hall table and walking into the parlor, to see by the south window the bronze-brown curls and mustache of her own Tom.

Hesitating in the centre of the room, she was met by that young man, who picked her up bodily, carried her to the Sleepy Hollow, where he enthroned her on his knee; and addressed her as follows: "I was a brute and a fool to treat you so, Daffy-down-dilly, though you were pretty spiteful. However, that's no excuse for me, since you are the weaker vessel, and I should have set you a better example, which, if you will come home, I will at once proceed to do. Spider and Cuddle are extremely lonely without you, and I am unable to take my usual comfort in the evening because they tease me so. Will you come?" And, like all the rest, she "clasped her happy hand in his and went content."

Did he ever see the painting? I am surprised! Of course she at once took measures to hide it, and congratulated herself on the fact that he needn't know anything about that. Equally, of course, in the sanctity of their own home, after the delicious dinner to which poor, starved Tom, Spider and Cuddle did ample justice, she at once produced the picture, told its destination and was loved and petted to her heart's content by the repentant Tom.

ANABEL C. ANDREWS.

A DESERTED GARDEN.

TANGLED ivy creeps and twines
Where once bloomed my lady's flowers:
And the twisting wild woodbines
Weave o'er all their clustering bowers;
And the fruit trees from the wall
Droop forgotten and forlorn,
And the rose trees, thick and tall,
From their trelliswork are torn.
Dewy paths—once velvet smooth,
For the dainty steps of youth—
Weedy now, and overgrown
With the rank grass all unmown.

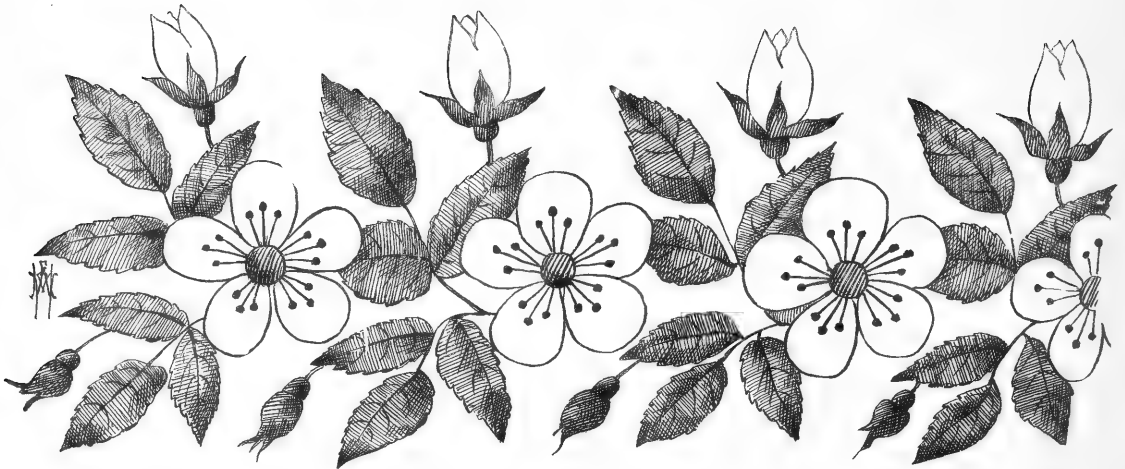
Here and there, amid confusion,
Gleams a berry scarlet hued,
And pale bindweed in profusion
(By the summer breezes wooed),
Creeps where once verbenas grew,

Or the myrtle flowered so fair
In the warm and scented air;
And the speedwell—deepest blue—
Shakes its frail flowers everywhere.

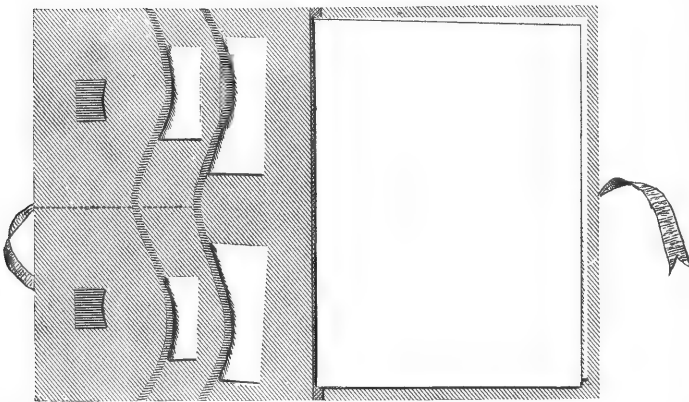
So, amid these paths—all haunted
By the memory of old flowers—
Grow these wild wood blooms undaunted,
Through the glowing autumn hours.
Ah! how long ago it seems
Since bright faces glowed and smiled
In this garden of our dreams,
Now so desolate and wild!
They will come again no more,
And no time shall e'er restore
Golden days and fairy flowers
To these wearied hearts of ours.

—Chambers's Journal.

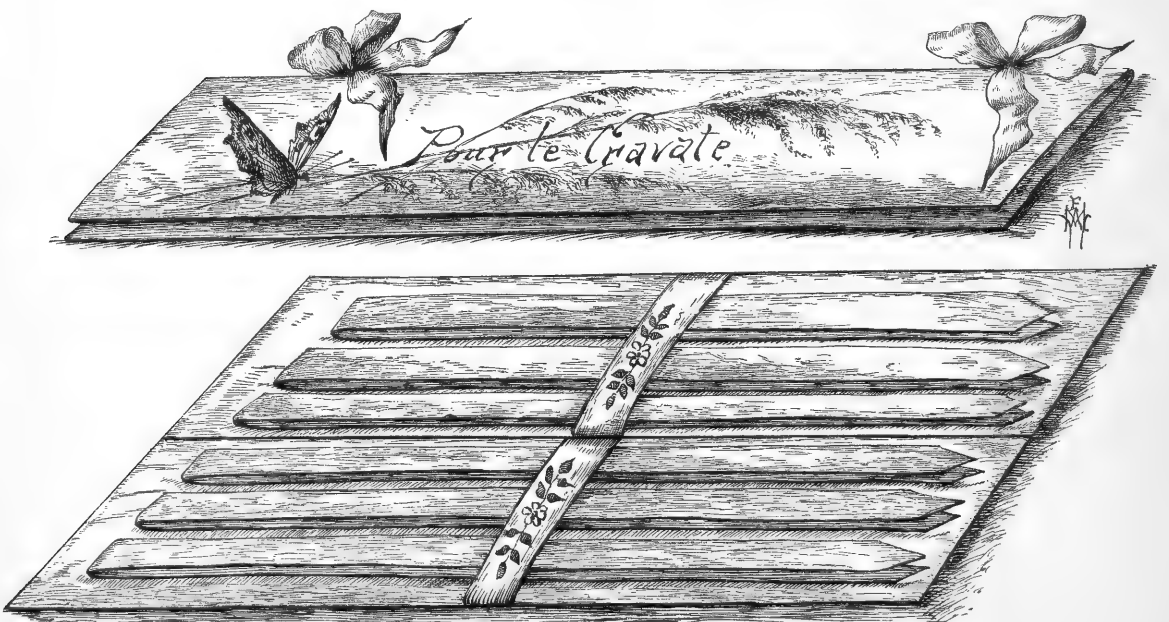
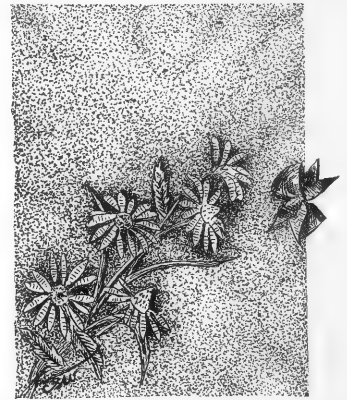
HOME DECORATIONS.



Rose Design for Satin Applique.



Portfolio for Writing Paper.



Cravat Case closed and Open.

A Table Scarf, with Decoration of Satin Applique.

IT is necessary that the designs for this work should be conventional, as they otherwise cannot easily be arranged. A table scarf of peacock-blue plush which was displayed in a needlework shop was very beautiful, with satin flowers applied. The design was of the deep-red single wild-rose which grows in rich profusion in Maine, and the effect of these roses, with their foliage and partly opened buds, was very pleasing.

The sketch should first be made upon the plush with a brush and Chinese white, or else stamped upon it, and the stems and leaves, also the calyx of the flowers, embroidered with silk.

The petals of the flowers are then cut from satin, rather larger than those of nature, and beneath each place two layers of wadding cut a little smaller than the satin to allow the edge to be caught down sufficiently close to prevent fraying, and still not press the cotton flat, for a raised appearance is the result desired.

The edges of the petals are finished with gold tinsel, sewed round each, and the stamens of the flowers are embroidered with gold-thread. When the embroidery is finished the scarf should be lined with gold satin, and a chenille fringe across the bottom of each end, or tassels of two or more colors which contrast well with the plush and design, make a pretty finish.

If other material than plush is preferred, sateen, velvet, cloth, or satin can be used, for satin applique is very pretty on any of these materials.

Should sateen or satin be the material selected for the scarf an interlining will be necessary to give more body to it; flannel or cotton flannel answers well for the purpose. This work is suitable also for sofa cushions, curtains, or in fact for almost any article on which embroidery can be used.

M. E. W.

Portfolio for Writing-Paper.

CUT two pieces of rather heavy pasteboard measuring nine by twelve inches. Glue to one of the long sides of each piece a strip of very strong white cloth, twelve inches long by an inch and a half wide, leaving a half-inch space between the boards, so that the strip of cloth will act as a hinge.

Dark-blue plush, velvet or a nice quality of velveteen is the material to be used for the outer covering. A cluster of cone-flowers, arranged as shown in our illustration, is worked on one side. The petals of these flowers are very simply made in ribbon embroidery with ribbosene, one stitch for each petal, and the cone-like centres are filled in with brown silk in knot-stitch. The leaves and stems are worked with fine chenille or else with heavy embroidery silk.

After the embroidery is completed cover the pasteboard leaves with the plush or velvet, letting it come over on the inside edge a quarter of an inch, just far enough to glue the edges to the pasteboard. When dry the blue silk or satin lining can be neatly blind-stitched

to them. Two curved pieces of the lining are bound with narrow ribbon and fastened to the cover, through the centre as well as on the sides and bottom, to serve as pockets for note-paper, envelopes and postal-cards. Two little receptacles for postage-stamps are stitched to the centre of the outer pockets.

Cut two sheets of white blotting-paper, fold them together, and fasten them to the cover by slipping them beneath a ribbon loop, which should be sewed to the cover at the back.

The portfolio is held together by yellow ribbons, to correspond with the cone-flower decoration.

S. A. WRAY.

Cravat Cases.

PRETTY, dainty little affairs these are, and very convenient also. They may be made of satin, plush or velvet as one may fancy, and should be fourteen inches long and four inches wide when finished, so as to hold a number of cravats without crumpling them, for they are doubled in the middle and slipped beneath the ribbon-strap with which the case is furnished. Light blue, pink, gold or cardinal plush are very pretty lined with satin of a contrasting color.

The cases can be made in the form of a book and tied together at the back with satin ribbon bows. Cardinal plush, lined with quilted gold satin, and finished with feather-edged satin ribbon bows of crushed strawberry, is extremely pretty.

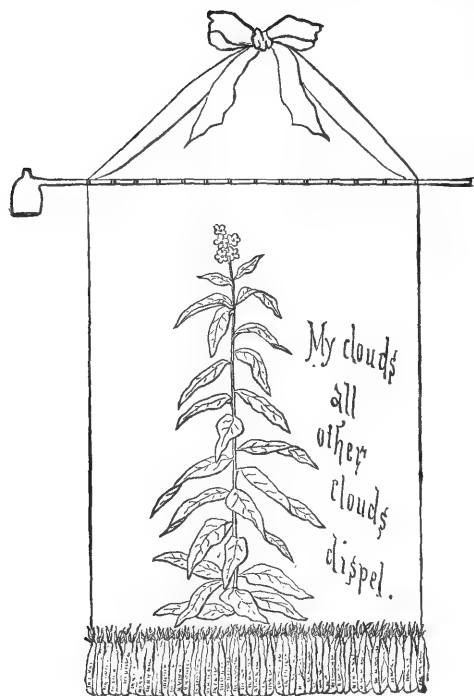
First, cut two pieces of stiff pasteboard the size of the case, and cover the outside with the plush. On the under side of each piece the gold satin is neatly fitted for the lining. If carefully done, no finish is required for the edge. Across the middle of each, on the lining, sew a strap of satin ribbon or ribbon velvet, but better still, perhaps, is a strap of silk elastic about one inch wide, and through this the cravats are to be slipped. Sew at the back, about three inches from the top and bottom of the case, satin ribbon bows of crushed strawberry, thus binding the two leaves together. On the outside of each cover paint some pretty or grotesque design, whichever may be preferred, and an appropriate motto if desired.

Designs in embroidery are also very beautiful, but if this decoration is used it must be done before the case is made up.

M. E. W.

Decorative Notes.

MEMORANDUM tablets are very prettily decorated with a ribbon border or frame, and so arranged with a support at the back that they can stand wherever it is most convenient to have them. The tablet is divided in three equal spaces; the first for engagements, the second for correspondence, and the third for calls. Two strips of inch-wide satin ribbon are laid flatly down each side and across the ends so that folds are avoided, the outside ribbon an olive brown and the one inside a pale blue. A sprig of forget-me-nots is painted on the ribbons where they cross at the lower right-hand corner, and the words "The Circling Hours," are lettered in gold on the



PANEL FOR SMOKING-ROOM.

upper corner, while on the opposite side at the top a bow is placed, tastefully arranged with the two colors of ribbon. Another tablet also shown at the Woman's Exchange is bordered with olive brown and pale yellow ribbon. Heads of white clover decorate this tablet and the words "Leaves of Memory" are lettered with silver.

Japanese umbrellas form novel scrap-baskets. A gaily colored one is chosen and fastened partly open, the head or top firmly fixed in a low tripod-shaped support made of wood and painted black. Flat tassels of various colored crewels are arranged around the outer edge of the umbrella, and a ribbon bow is placed on the handle.

A case for holding a number of cabinet photographs is shown at a prominent art store. A panel ten inches long by six inches wide is covered with pale blue plush. A pasteboard of the same width, but measuring five inches in height on the left side and three inches on the right, is also covered with the blue plush and forms a pocket on the bottom of the panel. It is lined with satin of the same shade, and a little pleat of satin on each side of the pocket is inserted where it joins on the side, to make a sufficient space for holding the photographs. A cluster of silver filigret flowers is fastened near the top of the panel, and another cluster decorates the pocket. Fasten a support at the back of the panel, so the case can be kept in an upright position, or it can be placed in a silvered rack which comes for such purposes.

Another photograph case exhibited at the Decorative Art Rooms is made to hold two photographs only, and is in the form of a book. Two pieces of pasteboard eight inches long by six and three-quarters wide are hinged together with a strip of muslin, as described for the portfolio in this number, and covered on one side with fancy-figured satin or, if preferred, plain velvet. Two other pieces of pasteboard of the same size have in the centre

an opening cut five inches long and three inches and three-quarters wide, just large enough to show the picture nicely. These pieces are then covered with the same material as the outside, drawing the cover neatly over the edges of the opening. Fasten a strip of the satin or velvet down the centre of the case to cover the hinge inside, and overhand the two open pieces to the cover, leaving a space at the top just wide enough to slip in the picture. C.

A Panel for Smoking-Room.

A VERY pretty panel, or hanging banner, for smoking-rooms is made of cream-colored sateen or satin, with design of tobacco plant, the leaves and flowers in appliqué of plush or velvet, the foliage green, the flowers white, outlined with heavy gold thread or tinsel. The banner when finished should be fifteen inches wide and three-quarters of a yard long.

The design can be stamped or faintly traced upon the sateen, and the leaves and flowers are cut from the plush to exactly fit the spaces they are to fill, then each carefully basted in place, outlined and veined with the gold thread or tinsel. The motto, "My clouds all other clouds dispel" is embroidered with wood-colored silks.

The panel needs an interlining of stiff canvas, and the back is covered with silk or cambric, either of the cream-color to match the sateen or some shade that will contrast well with it. Across the top small gilt rings are sewed about an inch apart, and the bottom is trimmed with a fringe made of the ribbons with which the cigars have been tied together, with the brand of the cigar stamped on each. The ribbons are doubled, or looped, thus bringing together the ends which are crinkled from being tied, and these are sewed to the edge of the sateen, forming a sort of heading to the fringe.

A red clay pipe with long reed stem serves as a rod upon which to hang the banner, as the stem, or reed, is run through the rings.

Yellow ribbons, the color of those for the fringe but rather wider, are used for a long loop, with bow and ends by which to hang it.

It is a pretty decoration for smoking-room or library.

M. E. WHITEMORE.



FAN TIDY.

Fan Tidy.

THE tidy design given in this number will be found to be something entirely new, and a very pretty and dainty little affair.

It can be made of odd pieces of dark and light silks, satins and velvets, combining them to suit the taste; but it is very essential that the dark and light pieces alternate, to give the desired effect of an open fan.

To secure the pattern for a medium-sized tidy, cut a piece of paper ten inches square. Fold it diagonally through the centre; measure from one point ten inches on this fold, and round it to the two points opposite, which also measure ten inches from the point at bottom of the fold. Cut the paper as marked and you have a quarter of a circle. Now fold it in twelve equal parts to

correspond with the folds in a fan. While folded, cut the rounded side, or that portion which would be the top of the fan, in points making the difference of half an inch between the bottom and top of the point. Cut a piece of muslin like this pattern, draw a pencil line from each point to the bottom of the fan. Baste the first piece over the edge, letting the raw edge lap on the next space. Sew the next piece down on this, turn it over and baste it on the next, in that way concealing the seams or raw edges of each. Continue in this way until all the spaces are covered.

Paint or embroider a few daisies and grasses on the fan, finish the top with white torchon or Oriental lace sewed underneath the points, and the bottom with a bow of satin, which conceals a large safety pin used to fasten the tidy to the chair. E. S. WELCH.

NEW YORK FASHIONS.

THE new goods seen in our stores this month recall in a measure the styles of last spring and summer.

Étamine or canvas dresses, bordered and plain, cheviots of light weight, diagonal twills, stripes—all these repeat last year's designs, while the foulards, India silks, and sateens, both figured and plain, surpass in coloring and design all that have heretofore been shown in these goods.

Stripes are particularly fashionable; they are shown in all widths, and in almost all materials. They vary in width from even inch-wide stripes to shaded stripes four and even five inches wide. These are composed of many lines of graduated widths, and, taken together, they form the wide stripe. They are particularly handsome in plush, which is woven of such light weight that it will not be burdensome in warm weather, even if used for the entire petticoat; that is, the front and side breadths of the skirt. It comes in most colors, and can usually be had to match the new wool goods.

Among colors, the most stylish for the spring and early summer will be browns, grays, and blues, both navy blue and the brighter shades.

The rage for embroidery seems to have reached its highest point. What can we have more than both wide and narrow bordering or flouncing, and also the "all-over" embroidery, as it is called. This all-over embroidery is used either for the underskirt or basque and draperies. It is not mixed with the plain goods, and the effect is much better so, as the richness of the embroidery is displayed to better advantage by having it in a mass than cut up—a panel here, a few pleats there, &c.

It seems as though the fancy for lace had reached its culminating point last summer, so all we can say is that it will be worn in the coming months quite as much as it was last year. Entire petticoats are covered with a deep lace flounce, and front and side draperies are trimmed with it. It edges sleeves and trims necks, both

high and low cut. Narrow Italian valenciennes is gathered slightly and sewed under the scalloped edges of embroidery, thereby enriching the latter more than would be deemed possible at so slight a cost.

Laces will be used in all the shades from white to Havana brown for trimming the soft silks and sateens in which our young ladies will look so pretty and dainty a little later in the season.

Cutaway jackets, worn over soft, full vests of surah, India silk, or some soft-finished muslin, are appropriate styles for these lovely fabrics, but their use should be restricted to the slight figures of rather young girls, as a stout or well-developed figure looks best in a tight-fitting, smooth corsage.

White wash dresses will not lose their popularity for this year. They will, in all cases, be trimmed abundantly with embroidery, and if the embroidery be finished with lace as suggested above, a very handsome dress can be made at a moderate expense. The stores are now full of the loveliest embroideries, and any lady who is clever with her needle can manufacture two or three dainty costumes that will stand her in good stead when the mercury is up among the nineties, and when even to think of wearing a colored dress raises one's temperature one or two degrees.

Immense buttons in all the metals and in wood continue to be worn largely on skirts. They are prettier on skirts than on waists, and one can always find small buttons for the basque that match or at least harmonize with those used on the skirt.

A turban made of the dress material is a pretty finish to a spring costume. Trim with metal clasps of a fancy shape that seem to hold the folds of the material in place, and a few fancy pins. A great many ladies always make their own bonnets and hats, and a few trials will render almost any lady an adept at this kind of play-work.

MELUZINA.

HOUSEKEEPING.

Cake without Eggs.

One-half cup of butter, two cups of sweet milk, two cups of sugar, five cups of flour, one teaspoonful of soda and two of cream of tartar. Flavor with nutmeg, and add raisins. Bake in two loaves.

Oyster Fritters.

Make a batter as for ordinary fritters, except in place of all milk for the wetting use half oyster liquor. Have the batter thick enough not to spread on the fat when cooking, but not so thick as to be tough. Nice beef drippings or suet are best to cook the fritters in, and there should be only enough so they will slip around but not float. When the batter is ready, take up one tablespoonful at a time, put an oyster in the spoon and have the fat sissing hot.

Beef Rolls.

Have the beef cut from the round as thin as it can possibly be and hold together. Then cut the steaks in pieces three or four inches wide and a little longer. Cut some thin slices of bread a little smaller than the pieces of meat, remove the crust and lay on the meat. Add to this a tiny slice of onion thin as a wafer, sprinkle with salt and pepper and flavor with any herb that is liked, only be careful to use it sparingly. When all are ready, roll each piece tightly, and tie with a string. They should look like sausage. Lay them in a porcelain kettle and pour some thin stock over them—just enough to cover them. The

kettle must be covered and kept where the contents will just simmer, for five hours. Then remove the rolls to a hot dish and thicken the gravy; color it with a little caramel and pour it over the rolls.

Pumpkin Pies made from Dates.

Stew one pound of dates in just water enough to cook them; when soft, strain as you would pumpkin and add one and a half cups of milk, four eggs and a little salt. Use the same spices that you would for pumpkin. If not sweet enough add sugar to your taste, and bake with one crust.

Fig-filling for Cake.

One quarter of a pound of figs and one half pound of raisins, a little of the juice and rind of a lemon. Boil in just as little water as possible, and let that evaporate all it will at the last. Then chop the figs fine, and add two tablespoonfuls of any kind of jelly. Thin with water if too thick to spread.

Oysters en Barrière.

Six good sized potatoes pared and soaked a little. Boil and mash them as for the table, then add the beaten whites of four eggs; beat together and set in the oven to brown. Heat one quart of oysters in their broth; scald one pint of cream or rich milk, and thicken it with one tablespoonful of flour; add the oysters and pour in the centre of the hot and browned potatoes, and serve.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

The American Florist is doing considerable good work, and some that is remarkably good; in the latter class is the effort to weed out duplicate names. It is a practice sadly too common for florists to rename varieties that have an already well-established name prefixing it with their own. This leads to confusion, disappointment and ill-temper, all of which should be avoided. It is very annoying for an amateur to order from different florists several varieties of carnations in order to have all the best sorts, and then to get a number of duplicates. And the custom does the florist great harm, as it destroys all confidence reposed in him and discourages the amateur from making further attempts to obtain complete collections. We are pleased to see that Mr. Thorpe has this matter well in hand, as we know it will result in great good to all.

* * *

Yellow *Zephyranthes*.—This is a bulb we often hear about but never see, simply because there is no such thing. We cannot in this case be very severe on those who say there is, as they have most likely confounded the genus with *Sternbergia lutea*, a perfectly hardy bulb with yellow, crocus-like flowers that are produced freely

in autumn. In foliage and form of flower it closely resembles *Zephyranthes candida*.

* * *

Pavia macrostachya.—In making a selection of ornamental shrubs for large grounds this native would be among the first we should choose. It is a superb spreading shrub, and was first brought prominently before the public in this country by H. W. Sargent, Esq., in his appendix to "Downing's Landscape Gardening," where it is enthusiastically described and admirably pictured. The following is a description of a specimen in his own grounds:

"Our best plant at Wodenethe, twelve years old, is sixty feet in circumference and about eight feet high, and has, at the time we write, between three and four hundred racemes of flowers, the feathery lightness of which and the fine umbrageous character of the leaves render it a most striking and attractive object."

This shrub is a native of the upper districts of South Carolina and Georgia, where it is found in great abundance, and when in bloom nothing can surpass the beauty of the mountain sides where it abounds. It comes into bloom late in June and continues blooming for a long

time. The roots yield a mucilaginous matter which is sometimes used as a substitute for soap in washing woolens.

* * *

New Imperial German Pansies.—This new strain of pansies, the result of careful selection for many years, together with high cultivation and a congenial climate, is something truly wonderful. As a rule, size is generally obtained at the expense of quality; not so, however, with these pansies, for, combined with their extraordinary size, are all the colors of the finest of the Odier strain. They are described as follows:

"They embrace all the solid or self colors; delicately shaded flowers; five-spotted on backgrounds of every color; large spotted; edged or bordered flowers of various colors, each with a distinct rim of white, yellow or blue; dark and light marbled varieties; flowers with bold, distinct eyes; striped flowers of striking beauty, and vividly-colored fancy varieties, blotched, veined, mottled and margined in combinations that would be thought impossible until the flowers are actually seen."

We notice that W. Atlee Burpee & Co., of Philadelphia, are making a specialty of these pansies, and give a life-size illustration in their advertisement.

* * *

The New York Floral Company, locally known as the "Big Four," has gone out of existence, having lived just four weeks. The local name was not intended as an indicator of the time the company should live, but of the four large growers whose flowers the company handled.

* * *

The Bill before the Senate introduced by Senator Wilson, of Iowa, to increase the postage on fourth-class matter to thirty-two cents per pound, instead of sixteen cents as it is now, will if passed do a great injustice to the horticultural and agricultural community of the country and should be condemned by *all*.

Agriculture and horticulture must be encouraged at whatever cost.

* * *

The New York Horticultural Society has found a new home in which it held its first business meeting on February 2. At the March meeting it is expected there will be a fine floral display in its new hall, East Fifteenth street. We regret our inability to obtain the schedule of premiums in time to announce them in the present number.

* * *

"OH, NOW BE FAIR! We refer to those exchanges who drop down on our carefully prepared columns, clip out matter which is solely our own, and print it in their pages without giving POPULAR GARDENING due credit. We detest such a practice, as we detest thieving from our orchard or from our purse. Clip if you will, but give credit where credit is due. That's all we ask."

The above, from *Popular Gardening*, is good, very good; we indorse every word of it. And the following from the same paper is mostly good; it could not be otherwise, because it is found in substance, and many of the sentences without much alteration, in THE FLORAL

CABINET, page 230, 1882. We do not think the writer could have paid very close attention to our correspondent's ("F. Lance") communication, or he would never have made such a geographical blunder as he did in transforming Natal into an island, and crediting it with the floral characteristics that belong to the South of France. However, read the following, then compare it with the article in THE CABINET, then read again our first quotation and smile:

"THE ISLE OF NATAL, near the southern extremity of Africa, is almost the perfect home of flowers. No frosts ever blast vegetation here. Roses of such fine sorts as Souvenir de la Malmaison grow to the height of ten feet in the open air, and are loaded with magnificent flowers. Tulips, narcissus, and hosts of garden flowers we here prize, grow wild along the roadside. Oleanders and myrtles are so common that their wood is used for fuel. Dracæna and yucca reach the stature of trees. The passiflora, bougainvillea and tacsonia, which are grown in the north under glass, climb the stately olive-trees and crown the highest roofs of the buildings."

* * *

The Fuchsia as an Annual.—The following very interesting article on the fuchsia, by George Fry, Esq., we copy from the *Gardener's Magazine*:

"As regards the treatment of the fuchsia as an annual, it is as easy a matter as the similar treatment of many other floral subjects for which you have to wait expectantly for three or four months before you are rewarded for the trouble, or, I would say, pleasure, devoted to them. As a rule, I sow my seed about the second week in February, plunging the pots or pans in bottom heat. The young plants generally make their appearance in about three weeks. When the seed-leaf has become fully developed, the young plants are carefully pricked off, placing them round the sides of new pots, using abundance of drainage. After giving a copious watering, the pots are plunged into the same bed, when, should proper attention be given, the young plants will soon become objects of interest by showing a varied form of growth in the foliage. In a few weeks the plants are carefully separated and transferred singly into small pots, using plenty of drainage, watering and returning them to their original quarters. They will soon make progress, and require judicious ventilation and attention strictly paid to shading, as the young plants are very tender, the fact to be especially borne in mind being that to succeed there must not be checks of any description. The young plants must be shifted on as required, never allowing them to become pot-bound. I like to grow the plants freely into their blooming state, and I find, under liberal treatment, that I secure beautiful, well-formed plants, ranging from ten inches to two feet or upward, according to the varied constitution, by hybridization, in about from four to five months, freely showing their bloom to perfection in various forms and colors. This will be about the end of June and the beginning of July, at which time they will require plenty of space to keep them sturdy and of a good form. I have had them perfect models as regards contour, and only fifteen inches to two feet high, and

have kept them blooming until late in autumn. During the hot summer months the structure in which the plants are growing cannot be too well attended to as regards shading, ventilating, &c. The fuchsia delights in a somewhat cool and humid atmosphere during the very hot weather. An arid atmosphere is by no means conducive to its well-being, neither can success be attained if these important items are not carefully considered and carried out in practice.

"In the treatment of fuchsias in the way I have described there is much pleasure and satisfaction obtained, more especially should the raiser of seedlings, by careful attention to crossing the best varieties, succeed in producing varieties at once novel and distinct."

Catalogues, &c., Received.

J. C. Vaughan, Chicago, Ill. A neat, concise, complete and instructive catalogue of seeds, tools, bulbs and garden requisites.

J. T. Lovett, Little Silver, N. J., sends us a pure gold catalogue of fruit trees and small fruit plants. We do not know of a more desirable publication for the horticulturist.

R. H. Allen Company, 189-191 Water street, New York. Annual spring catalogue of farm, field and flower seeds.

Charles A. Reeser, Innisfallen Greenhouses, Springfield, Ohio. A large and handsomely illustrated catalogue of greenhouse plants, bulbs and seeds.

E. Y. Teas, Dunreith, Ind. Annual spring catalogue of new pears, grapes, small fruits, trees, shrubs, bulbs and ornamental plants.

E. H. Ricker & Co., Elgin, Ill. Wholesale and retail catalogue of fruit and ornamental trees, small fruit plants, roses, &c.

F. N. Lang, Baraboo, Wis. Spring catalogue of flower, vegetable, field, tree and flower seeds.

Cole & Brothers, Pella, Ia. Illustrated seed catalogue and guide to the flower and vegetable garden.

Bailey & Hanford, Makanda, Ill. Wholesale catalogue of red cedars and forest-tree seedlings. The Mammoth Dewberry a specialty.

Edward Gillett, Southwick, Mass. Ninth annual catalogue of North American wild-flowers, including orchids, lilies, ferns, &c.

J. O. Manson, Harford, Pa. Vegetable and flower seed catalogue for 1886. Full of valuable cultural instructions.

Hooper & Co., Covent Garden, London, Eng. Annual spring catalogue of vegetable and flower seeds.

Wm. Henry Maule, Philadelphia, Pa. Annual illustrated catalogue of vegetable and flower seeds, plants, &c.

The Michigan Horticulturist is the title of a new monthly published at \$1 per year by the W. H. Burr Publishing Company, Detroit, Mich. It is neatly gotten up, and the matter is above the average of horticultural papers.

Dreer's Garden Calendar for 1886, Henry A. Dreer, Philadelphia, Pa. This is one of the most comprehensive catalogues of seeds, bulbs and plants we have seen.

Ellwanger & Barry, Rochester, N. Y. Descriptive catalogues of fruits, and of ornamental trees, shrubs, &c. Our readers know just what to expect when this firm makes an announcement.

E. Bonner & Co., Xenia, Ohio. Annual catalogue of roses and bedding plants. We value this catalogue because of the "Co." (Mrs. B.) It is reliable.

John Saul, Washington, D. C. Annual illustrated catalogue of plants for 1886. This is a good publication in which to look for plants not generally catalogued.

L. Templin & Sons, Calla, Ohio. Illustrated catalogue of "Beautiful Flowers" for the house and garden, including a select list of hardy ornamental shrubs, vines, &c.

Chas. C. McColgan & Co., Baltimore, Md. In addition to the garden, flower and field seeds, this catalogue gives a list of tested novelties and approved varieties of recently introduced vegetable seeds.

Paul Butz & Son, Newcastle, Pa. Illustrated catalogue of plants and trees.

C. E. Allen, Brattleboro, Vt. Annual catalogue of seeds, plants and small fruits. Novelties in plants, as well as in flower and vegetable seeds, are offered, and among small fruits the Jewell strawberry is given prominence.

J. K. Nevins, Montague, Mass. Catalogue of fruit and ornamental trees, grape-vines, small fruits, roses, shrubs and flowering plants.

V. H. Hallock, Son & Thorpe, East Hinsdale, N. Y. This firm makes a specialty of the chrysanthemum, giving a most complete and comprehensive list of these popular plants. A select list of the best established varieties of geraniums is also given in their catalogue, and much valuable information relating to plants, bulbs, seeds and small fruits.

Robert Buist, Philadelphia, Pa. This catalogue is in reality a garden guide, giving as it does full instructions for growing the most desirable vegetables, with directions for making hot-beds, cold-frames and cold-pits.

Frank Ford & Sons, Ravenna, Ohio. Spring catalogue of "Ford's Sound Seeds," small fruit plants, vines, &c.

Robert C. Reeves, 185 and 187 Water street, New York city. Catalogue of seeds and agricultural and horticultural implements.

Springfield Seed Company, Springfield, Ohio. A catalogue of field, garden and flower seeds, plants, fruits and implements.

John R. & A. Murdoch, Pittsburgh, Pa. A large and comprehensive catalogue of vegetable and flower seeds, plants, trees and small fruits.

Among the gems of art showing the beauties of flowers, no recent publication excels the "Portfolio of Rare and Beautiful Flowers," issued by James Vick, Seedsman, Rochester, N. Y., at two dollars per copy. Armstrong & Co., the famous Boston lithographers, whose skill and taste combined to produce the six plates (each 11 1/2 by 14 1/2 inches), say of them, "The work is of the best we have ever turned out." The plates will add to the attractiveness of many homes, and the accompanying descriptive matter will add to the store of information of lovers of floriculture everywhere. The subjects are as follows: "Roses and Pansies," "Oncidium Varicosum,"

"*Cattleya Gigas*," "*Nepenthes* var. *Hookeri* X *Rafflesiana*," "*Cypripedium Lawrencianum*," and "*Passiflora Decaisneana*." The lovers of the beautiful will welcome them everywhere they go.

"Fertilizers." By J. J. H. Gregory, A.M., author of several manuals on vegetable culture. There are but few names more familiar to the farmers and market gardeners of this country than that of the author of this, the most useful of all his publications. The use of commercial fertilizers is becoming very general, in fact, almost universal; consequently any information that will assist the agriculturist in obtaining the cheapest and best will be most gladly received. The fear of imposition in the selection of fertilizers has prevented a more general use of them than they now have. The dealers are not altogether to blame for the suspicions that rest on them, as

many farmers buy such as are not adapted to their soils, and therefore do not get good results. Mr. Gregory comes to the rescue of such and tells them what they want, where to get the materials and how to prepare them. This guide will enable every farmer to secure the best fertilizer at the least possible cost.

THE large, convenient and attractive calendar issued by N. W. Ayer & Son, Philadelphia, has been a part of the office furniture of THE FLORAL CABINET from year to year, daily contributing its share to the conduct of business. The firm issuing this calendar has long maintained a leading place among advertising agencies, honorably serving both advertisers and publishers, and merits its decided success. The calendar is so costly to produce that it cannot be gratuitously distributed, but is sent upon receipt of 25 cents.

ANSWERS TO CORRESPONDENTS.

Editor Floral Cabinet:

I wish you would induce some of your rose friends to put tobacco stems or the refuse from making cigars around their rose-bushes. I treat mine to a mulch of tobacco every spring, and my roses are not troubled with slugs, when other bushes are mere skeletons.

MRS. C. P. K. BELLVILLE, Ill.

Cooperia.—*S. L. Warminsky.*—These are half-hardy bulbs from Texas. They should have a dry, sunny situation, and be protected from frosts in winter. They are injured by being long out of ground, which is probably the cause of yours not flowering. You will have no trouble in flowering them if planted where water will not stand over them, and if protected from freezing.

Lilium auratum.—*Buckeye.*—If your bulb is sound it will most certainly flower again, and you can grow it in a pot with every assurance of success. Use an eight-inch pot filled with good strong loam, and give good drainage. The only difficulty in pot-culture is the liability of drying up. In our climate evaporation is so rapid that plants in pots are injured beyond recovery before we are aware of it.

Calla.—*Georgie.*—Give your plants all the light, water and heat that you conveniently can; liquid manure once a week will be very beneficial. About the first of June plunge the pots up to the rim in a sunny place in the garden. Take up and repot about the first of September.

Wistaria.—*Amateur.*—Yes, the wistaria is as easily grown from seed as a pole bean, and if you have a large space to cover it is a simple way to do it. The plants will not, however, come into bloom as quickly as if propagated by runners.

Callas.—*Mrs. A. Bowen, Washington Territory.*—Callas may be propagated by offsets, which should be taken off when the plants are at rest, or when they are re-potted. Put them singly in two-inch pots, or for the

first year in shallow boxes, and they will bloom the second year.

Roses.—*Same.*—The temperature for roses depends very much on what rose you wish to grow. It is a question difficult to answer, as rose growers themselves do not agree on the subject. It is one, moreover, that cannot be well treated in this department of our paper, as it would require too much space. We will say, however, that without a greenhouse rose-growing, to any extent, is quite likely to prove a failure.

Small Fly.—*Same.*—Your enemy is thrip; fumigate with tobacco or syringe plants two or three times daily.

Sour Soil.—*Same.*—This is readily distinguished by the effect it has on the plants. You will have to be shown instead of told. Aphis may be destroyed in the same manner as thrip, but far more easily.

Annuals for a Border.—*An Old Subscriber.*—Sweet alyssum will do nicely for an outer border; for the third row *Gaillardia picta Lorenziana*.

Insects.—*H. Hunter.*—Why insects come is a question somewhat difficult to answer; but they usually do come when the conditions of plant growth are unfavorable. We should say, let the soil in which the plants are growing get moderately dry, so that the leaves begin to droop a little. Then water liberally with lime-water. If that does not destroy them shake the plants out and wash the roots clean in tepid water, and repot in fresh soil.

Cactus.—*Mrs. J. M. B., Elmhurst, Wis.*—If your cactus becomes soft and limp after blooming, do not cut it back but rather encourage growth as much as possible.

Double Calla.—*S. B. H., Hazelton, Pa.*—Callas with malformed flowers are of very frequent occurrence and the twin-spathe form often appears among these malformations.

NEWSPAPER WAIFS.

"The English are getting up a monument to Walt Whitman. Why don't they stand one of his lines up on end? They have feet enough, any one of them, to stand alone.—*Lowell Citizen*.

"Some infernal old idiot has put my pen where I can't find it," growled old Asperity this morning as he rooted about his office desk. "Ah—ah—yes! I thought so," he continued, in a milder tone, as he hauled the writing utensil from out behind his ear.—*Chicago Telegram*.

PASSING THE GOOD WORD ALONG.

The gratitude of patients is a constant source of encouragement to physicians. Letters full of expressions like the following, received by Drs. Starkey & Palen, 1529 Arch Street, Philadelphia, Pa., show the bright and noble side of human nature:

"I write to express my gratification that I am able again to write myself 'very well' (thanks to the Compound Oxygen Treatment), and to ask advice for others in the house who are under the same treatment.—ANNA L. JOYNER, Richmond, Ark."

"I have recommended the Oxygen to a great many people, and about a dozen have ordered it, either directly or through me, and in every case but one the parties have been benefited and speak highly of its good effects, which is very gratifying to me.—JAS. J. STEELE, Dundas, Ontario, Can."

From Bloomington, Ill., a patient writes:

"I have sent you not less than a dozen patients from this city, and my sister has, within the last few weeks, sent several more. We have recommended your Oxygen because we have been benefited and wish others to profit by it also, and because *we fully believe in it*."

Mrs. G. W. Spaulding writes from Ferndale, Cal.:

"I got a Home Treatment about a year ago, and it did me so much good I must let others know about it. I was spitting blood after a bad spell of *pneumonia*, and it cured me; and I have used it on others with good effects."

Mrs. S. C. Judson, an artist living in New York city, at the Hanover, West Eighty-third Street, writes:

"The Compound Oxygen has done me good, and you may publish my statement. I have always relied on it for conquering my ailments and have never employed a physician. For a year or two have been well enough not to require anything; now, however, have a hard cold and catarrhal tendency and want a new Treatment badly. My father, Rev. J. B. Pradt, of Madison, Wis., is, as you know, constantly distributing your literature and talking up the merits of your Compound Oxygen."

Rev. Edward J. Fisher, pastor of a Presbyterian church, Bristol, Morgan county, Ohio, writes:

"A Treatment cured me entirely of a severe attack of pneumonia, and I used only two-thirds. The remainder cured a neighbor of pneumonia in its last stages. I regard Compound Oxygen as the greatest invention or discovery in medicine and therapeutics in the past hundred years."

Rev. Cyrus Hamlin, D.D., LL.D., President of Middlebury College, Vermont, writes:

"I derived so much benefit from your Compound Oxygen Treatment last year, that I will ask you to send me the same supply for home treatment with the Inhaler, for which I enclose the price. By my advice others have tried it, and never without benefit."

Drs. STARKEY & PALEN have the liberty to refer (in proof of their standing as Physicians) to the following named well-known persons who have tried their Treatment:

HON. WILLIAM D. KELLY, Member of Congress, Phila.
REV. VICTOR L. CONRAD, Editor *Lutheran Observer*, Phila.
REV. CHARLES W. CUSHING, Lockport, N. Y.
HON. WILLIAM PENN NIXON, Editor *Inter-Ocean*, Chicago.

JUDGE JOSEPH R. FLANDERS, Temple Court, New York.
MRS. MARY A. CATOR, widow of the late Dr. HARVEY CATOR, Camden, N. J.
MRS. MARY A. DOUGHTY, Jamaica, Long Island, N. Y.

MRS. MARY A. LIVERMORE, Melrose, Mass.
JUDGE R. S. VOORHEES, New York City.
MR. GEORGE W. EDWARDS, Proprietor St. George's Hotel, Philadelphia.
MR. FRANK SIDDALL, Merchant, Philadelphia.
MR. WILLIAM H. WHITELEY, Silk Manufacturer, Darby, Philadelphia.

And many others from every part of the United States.

"Compound Oxygen—Its Mode of Action and Results." is the title of a volume of nearly two hundred pages, published by Drs. Starkey & Palen, which gives to all inquirers full information as to this remarkable curative agent and a large record of surprising cures in a wide range of chronic cases—many of them after being abandoned to die by other physicians. It will be mailed free to any address on application.

REMARKABLE RECUPERATION.—D. M. FERRY & Co., the well-known Seedsmen of Detroit, Mich., announce that they are on their feet again and ready and anxious to receive orders for seeds from *every one* of their old customers, and from as many new ones as feel kindly disposed toward them. They are in condition to fill promptly every order with new seeds of the best quality.

On January 1st their immense warehouse was destroyed by fire. It was filled with probably the largest stock of assorted seeds ever gathered under one roof. Their books and papers were all saved, and every person who had ordered seeds of them will be supplied with his usual stock. They had large quantities of seeds in their warehouses on their seed farms in the hands of their growers and not yet delivered, and on the way from Europe, which, together with their fully stocked branch Seed Store in Windsor, Ontario, close at hand, and the free and vigorous use of the telegraph and cable, enabled them to secure a new stock in a remarkably short time.

Before the fire was subdued they had secured new quarters and were devoting all their energies to their customers' interests. In thirty days from the fire they were in perfect working order again.

When we consider the magnitude of their business, the appalling destruction of property at the most unfortunate season of the year, we doubt if the annals of history furnish a case of such rapid recuperation. *Such energy deserves success.*

—Some lies are made out of whole cloth. The cloth is made out of wool that is pulled over people's eyes.

—Family Physician—"I'm afraid that you have been eating too much cake and candy. Let me see your tongue." Little Girl—"Oh, you can look at it but it won't tell!"—*Judge*.

—First Newsboy—"Say, kid, why do they buy 'shoes' for the fire-engines?" Second Newsboy—"Colly, you're an ignoramus. They uses 'em to keep the hose from wearing out."—*Philadelphia Call*.

—Mrs. Grundy says that "many young women are conspicuous by their efforts to catch husbands. Are we to understand from this that husbands in New York are so fast that they are very hard to catch?"

—Those who have used the Boss Zinc and Leather Collar Pads and Ankle Boots say they are the best and cheapest because most durable. They will last a life time. Sold by harness makers on sixty days' trial. Dexter Curtis, Madison, Wis.

—Applied Science. Miss Joy—"Madam, Mr. Foster has come to take me for a drive, may I go, madam? Madam—"You know, Miss Joy, the rules of Vassar do not allow it, unless you are engaged—are you engaged to Mr. Foster?" Miss Joy (doubtfully)—"N-no, but—if you will let me go I shall be by the time we get back."—*Life*.

One Cent Invested

in a postal card on which to send your address to Hallett & Co., Portland, Me., will, by return mail, bring you free, full particulars about work that both sexes, of all ages, can do and live at home, earning thereby from \$5 to \$25 per day and upwards. Some have earned over \$50 in a single day. Capital not required; you are started free.

—A frequent want arises in families for a reliable liquid glue, something which can be depended upon, in all the emergencies of domestic affairs. From a personal experience with Le Page's Liquid Glue, we bear hearty testimony to its value and convenience. It answers equally well for china, glass, wood, leather and paper, and makes a "fast" friend of every user. In the United States National Museum at Washington it is the *only* glue used for repairing the various skeletons, from a whale to a mouse, and is highly esteemed there for all purposes.

"EUREKA"

PURE SILK

"WASH"

"SILK"

A RIDDLE.

What can't run in the least
But is 'fast' as can be?
Susy, look at these mittens
And try to tell me."
"Oh, that's easy, mamma,"
Said the bright little one,
"It is EUREKA SILK
Whose fast colors won't run!"

Knitting AND FLORENE Embroidery Silks

All Experts in Knitting, Art Embroidery, Etching, etc., prefer the EUREKA SILK

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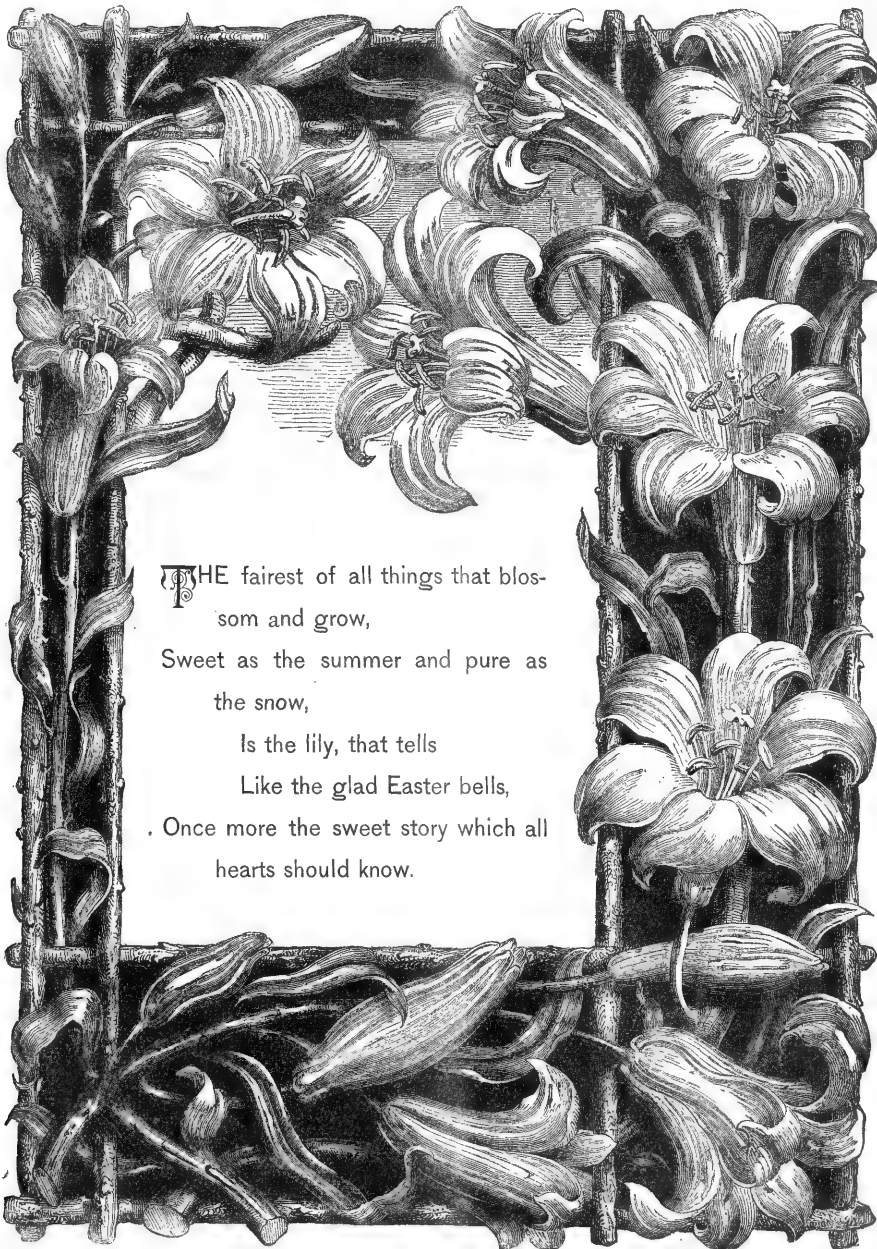


LADIES' FLORAL CABINET.

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EASTER LILIES.

WHAT are they? Not, as a whole, what they used to be. We remember well when Easter lilies were not lilies at all, but callas; plants that had assumed the popular name, lily, because of their purity and whiteness. Then the *Lilium candidum* was termed the Easter lily, not only because of its rare and chaste beauty, its delicious fragrance and its stately, graceful habit, but because the florists are enabled to have it in the greatest profusion at Easter, when wealth contributes so freely to furnish flowers for the decoration of the church. This lily certainly is more emblematical of religious faith than any other that bears the name.

The many varieties of *Lilium longiflorum* are now claiming the distinction of being Easter lilies, because the florists can supply them for the occasion and because the flowers are of spotless purity. Yet in all that goes to make a beautiful flower *longiflorum* is so far behind *candidum* that there is no comparison between the two.

Every day the number of Easter flowers increases, but certainly there has been no improvement, or rather no addition, to the charms possessed by the *Lilium candidum*, which has been in many countries considered a sacred flower for the past twenty-five hundred years.

For decorative purposes this lily is admirably adapted, because in whatever position it is placed, whether singly, in pots, in groups, as a cut-flower in vases, or made into floral designs, it ever retains its purity, its dignity of character and its delightful fragrance. It sweetly resigns its life for the joy of others. What life could do more?

As a garden flower the cultivation of the *L. candidum* is most simple. It will thrive in any fairly good soil, but to insure a free growth and a profusion of flowers, the soil should be rich, deep and moist. It is therefore best to make suitable arrangements for the bed by first selecting a suitable situation, and then putting it in the most perfect condition by digging deep and thoroughly enriching. Plantings should be made in August, when the bulbs are at rest. And having planted them, the next best thing to do is to leave them undisturbed as long as they bloom in a satisfactory manner. It is an excellent plan to mulch the bed with newly-fallen leaves, to the depth of three inches, in autumn. Shaded, or partially shaded, situations are often recommended for lilies, and, as a rule, such are best, but for the *candidum* an open, sunny position, where it can have a free circulation of air, is preferable. Shelter from our cold, northerly winds is desirable, as in much-exposed places the white lily often fails to flower, owing to the destruction of the incipient flower-buds by frost in May. All early-flowering lilies should be protected from the cold winds of spring. Plenty of moisture is also desirable when the lily is coming into flower. In respect of taste, the white lily should be so planted that its shabby stems will be concealed, for when wild it grows among tall grasses, and hence it is that as the flowers expand the leaves below them usually wither. When planted among clumps of tritoma or yucca, the deep, leafy foliage of these plants enhances the beauty of the lily.

NATIVE ORCHIDS.

THE orchid family is one of the largest and most widely distributed in the vegetable kingdom, and is found in all parts of the world, excepting in very cold or very dry regions, and among all its numerous representatives there are few of value in medicine or the arts. Vanilla is the only common article derived from a member of the family.

In the tropic and warmer regions of the world the epiphyte forms are most numerous, and from these regions the greater number of gorgeous and curious forms that are cultivated in conservatories are brought.

Orchids are very highly appreciated among lovers of flowers and many of the rarer species and varieties are very valuable.

Only a few weeks ago at a sale of orchids in New York a single plant brought \$900, and another \$750. Many firms employ collectors to penetrate the dense woods and dismal swamps of the tropical regions for new and rare forms; and the stories told of the beauty of these gems of the vegetable world, of their numbers and gorgeousness as they throw their wonderful flowers from the trunks and

branches of trees and vines, are enough to give every flower enthusiast a desire to share the hardships for a taste of the pleasures, little realizing that there is equal pleasure, without the hardships, in finding our own orchids.

Our native orchids, when compared with the gorgeous forms from the tropics, appear small and insignificant and very humble in station, for all orchids in the temperate and cooler regions of the world are terrestrial; but when our native species are compared with species from other temperate countries they are found to be equally as handsome and varied. And while we have many that are without bright colors or conspicuous forms, and of interest only to the botanist and lover of wild-flowers, there are others that are very charming and worthy of a place in our gardens and they will repay with most charming flowers any special treatment they may require.

We have, in the United States about one hundred species of the orchis family, and by far the largest genus is the *Habenarias*, or rein-orchis, which comprises one-third of

all the North American species. More than one-half of these are found in the Eastern States, and they include the most beautiful varieties.

One of the most common and finest species is the smaller purple fringed-orchis; it is a stately plant in its native haunts, with a straight stem one and a half to three feet high, well clothed with oblong, dark glossy green leaves, gradually diminishing in size from the large ones at the base to the bracts. Terminating the stem is the flower spike; the flowers are rose purple, with a fringed lip and densely crowded in a spike from six to ten inches long.

This plant seeks a sheltered spot, for its tall stem will not withstand rude gusts of wind. It is found in protected openings in the woods and along the edges of meadows, among the tall grass and low shrubs. I have seen a grassy opening almost purple, so numerous were the flowers. Through the opening ran a brook, lined with the flaming spikes of the cardinal flower and the purple plumes of eupatorium; a fringe of bushes backed by forests of pine and maple outlined the scene.

In the damp woods and shady swamps of New England we often find groups or scattered plants of the larger purple fringed-orchis, *Habenaria fimbriata*, in charming contrast to the brown leaves, green mosses and gray bark surrounding it. The character is similar to the last, but it has much larger and lighter colored flowers, with a more finely fringed lip; the leaves are blunt and the whole plant is more graceful in outline, but is not so stately.

Southward along the Alleghanies, in moist meadows and banks, we find another beautiful species, *Habenaria peramena*, with dense oblong or cylindrical spikes of large violet purple flowers with a large pale lip; it is not often found in great numbers in any one spot, but the single plants are very pretty.

The white fringed-orchis, *Habenaria blephariglottis*, does not grow so tall as the ones named; the leaves are narrower, lighter green and not so numerous, but the large pure white and delicately fringed spikes of flowers are very charming. It grows in cold, wet bogs, in moss, and among grasses or in the edges of shrubs and woods adjoining. Occasionally it is found in great abundance, and makes a charming sight.

Habenaria ciliaris is similar in habit, but the flowers are the brightest shade of orange yellow; it is occasionally found growing with the last species, but more frequently in wet, sandy places; it has the brightest and handsomest flower of all the habennarias.

Habenaria orbiculata, although not having bright colored flowers, is one of the most interesting orchids. It has a pair of great thick orbicular leaves, often eight inches across and lying flat on the ground, very dark and glossy on the upper surface and silvery underneath; the flower spike pushes up between them, straight as an arrow, from one to two feet high, with its loose spike of greenish white flowers standing out from the main stem on short pedicles. The divisions of the flower are long and narrow, giving the spike a very interesting character.

Habenaria Hookerii is similar to the last, with greenish yellow flowers; each flower is a sprawly-looking affair and reminds one of a spider crawling up the stem.

Orchis rotundifolia is a little plant with a spike of rose purple flowers and a single roundish leaf; it is found in damp woods and bogs northward and is very pretty and interesting in flower.

Of the rattlesnake plantains *Goodyera pubescens* is the best and most easily obtained. The leaves of the plant are especially attractive; they are a dark, rich green, conspicuously varied with white, the plants lie flatly on the ground and as they spread form elegant mats of evergreen foliage; they are frequently met with in the leaf-mould under hard-wood trees. The flowers are white in a close spike. This plant is much used in wardian cases for winter, the peculiarly colored leaves add a pleasing variety and the flowers will push up during the cold months. It is quite desirable for moist, shady places in a rockery or in leaf-mould under shady trees in the grounds.

We have several ladies' tresses, or spiranthes, all with white flowers in a twisted spike. They are not showy, and, while a single plant would be of little account in the garden, a group of them would be very pretty. *Spiranthes cernua* is one of the most common kinds, and varies greatly.

The meadow variety is from four to six feet high, with a short spike of fragrant white flowers, and a variety in dry land is often a foot high with a long spike of greenish white flowers having rather a rank fragrance.

Another dry land species, *Spiranthes gracilis*, has very slender stems and distinctly twisted spikes of small white flowers.

One of the most charming of our native orchids is the arethusa (*Arethusa bulbosa*). The flowers are from one to two inches long and terminate an apparently leafless stem; they are a bright rose purple. The bearded lip is horizontal, and the petals and sepals unite in a gracefully arching hood above it. It is found growing in mossy meadows, in some localities quite abundant and very frequently in company with *Pogonia ophioglossoides*, another of our beautiful wild-flowers. This has a slender stem with a single oval leaf in the middle; the flower has a delicate and very pleasing fragrance and is a light rose color with a bearded and fringed lip.

I have seen the last two plants and the following one grow very successfully in sphagnum in greenhouses, and under such treatment the flowers were larger and handsomer than in their native habitats.

Calopogon pulchellus is another charming orchid and is quite common in cold bogs and grassy meadows. The single leaf is linear and grass-like, and the plant would not be noticed unless its large spreading rose-purple flowers were open; there are from three to five of these flowers, an inch in diameter, graceful and pretty, with the lip beautifully bearded with white, yellow and purple hairs.

Calypso borealis is one of the most charming orchids and one of the rarest gems among them. It is only four inches high, with a single ovate leaf; the flower has a little sack-shaped lip, woolly inside. The petals and sepals spread upward and outward and are beautifully veined and variegated with purple, pink and yellow. It is more appreciated on account of its rareness and is seldom

found in the dark and damp Northern woods under evergreens in its bed of moss, excepting by the botanist in his search for rare plants.

The coral-roots attract attention by their oddity. The whole plant is brownish, generally quite dark and without leaves. All the species have small or dull-colored flowers, but *Corallorhiza Macraei* has the largest. The plants themselves are not only peculiar, but the roots, made up of short rounded branches, have very much the appearance of coral.

The Adam-and-Eve, or putty-root (*Aplectrum hyemale*), has similar flowers to the last named, also a large pleated green leaf. The root produces each year a thick bulb filled with a very sticky substance, and as the old root does not shrivel when the new one is formed, they are both present and attached to each other; hence the name, Adam-and-Eve.

The showy orchis, *Orchis spectabilis*, has two dark-green glossy leaves and a few spikes of purple and white flowers; the petals are united and arched over the lip, and the internal parts of the flower suggest the form of a miniature man standing behind the lip, like a "preacher in the pulpit," and this name is often given to it.

Perhaps the most beautiful and worthy of our orchids is the showy lady's-slipper (*Cypripedium spectabile*). It has a large and fully inflated white lip, delicately veined with pink, beautifully shaded and nicely formed petals and sepals. There are often from four to eight stems to a plant, each stem one to three feet high, clothed with broad pleated leaves and terminated by one and sometimes three flowers.

I saw this plant in perfection a few years ago in Minnesota. A side-hill was covered with brakes, the plumes of the ostrich fern, osmundas, sedges and grasses, forming a slope of varied green; through this in every direction pushed great clumps of the showy lady's-slipper in full bloom. The painted cup (*Castilleja coccinea*), with heads of the most brilliant scarlet from four to five inches long, added brightness to the scene. Here and there was a plant of the yellow lady's-slipper in flower and tufts of *Polygala Senega* with its pure white spikes; many cone flowers and perennial sunflowers lifted their heads above the surface of green which was varied with their bright colors.

We have two yellow lady's-slippers (*Cypripediums*

parviflorum and *pubescens*); both have a yellow inflated lip and long, twisted brown sepals; the stem is leafy, and from one to two feet high.

C. parviflorum, the smaller lady's-slipper, varies from the larger one in having smaller and fragrant flowers; both are bright-colored and very pretty.

The stemless lady's-slipper (*Cypripedium acaule*) is the most common variety in the East, and is very pretty with its large inflated purple-veined lip and brownish and greenish petals and sepals; it varies from the others in having only two large leaves springing from the ground, the single flower rising on a leafless stem between them.

Occasionally a pure white variety of this flower is found, and I saw last summer a spot where there was a large number of plants with their flowers varying from pure white to the usual form.

There are several smaller flowered species that are pretty and interesting, but not conspicuous; the most charming of them is the ram's-head lady's-slipper (*Cypripedium arietinum*). It has a peculiarly formed and beautifully colored sack, with a projecting point.

The small white species, *Cypripedium candidum*, has white flowers and dense tufts of leafy stems.

Those here described are among the most charming of our native species, and the most of them I have seen under cultivation. Many others are very curious and interesting, and would be desirable if a person was disposed to make a large collection of this family.

The best methods of cultivating native orchids is found in the study of their native habitats and following out these conditions as nearly as possible.

The habernarias grow in meadows or woods, where the root is protected from the sun and always moist. *Spiranthes cernua*, arethusa, calopogon and pogonia grow in grassy meadows with the roots in living sphagnum.

The coral-roots grow in leaf-mould, and probably derive nourishment from living roots of other plants.

The lady's-slipper will grow in moist leaf-mould, and likes a somewhat shaded situation.

An artificial bog can be made in some shaded corner of the garden, and conditions made to suit a large share of the plants named; it would be an interesting locality and many beautiful things could be grown in it.

WARREN H. MANNING.

WHERE THERE'S A WILL THERE'S A WAY.

YOU often hear people say, "I do wish I could grow a few flowers, but I have no place to put them." For the benefit of such persons I would like to "give in my experience," as our Methodist friends would express themselves.

My room has two windows that face due north and it seemed an almost hopeless task to grow anything in them, but I determined to try.

I had a box made, eight or nine inches wide and six inches deep inside, and as long as the window was wide;

this I secured to the sill, outside. I then filled it, to within an inch of the top, with a mixture of street dirt and loam, half and half. This was my garden.

In each end of the box I planted some vines, in one end sweet-peas and in the other cypress-vine; in the inner edge of the box I planted a few pansy seed. This was in April. In the early part of May a friend gave me three small plants of camellia-flowered balsam and a few seeds of ageratum; these I planted in the outer edge of the box.

My pansies were the first to bloom, which was in the middle of June; these were followed by the balsams and sweet-peas. In August the ageratum and cypress-vine bloomed; and all except the peas (which only flowered about six weeks) were in bloom until frozen up. Although this modest window-garden had only half an hour's sun each clear day, and that the first thing in the morning, the flowers were of good size and color, but would not

produce any seed. All the care they received was a basin full of soapy water each evening, and an occasional stirring of the ground, what little of it was exposed; you may guess that was very little, with six pansies, three balsams, two ageratums, six cypress-vines, and four sweet-peas in a box eight inches wide by thirty-five inches long. Hoping this may encourage others to make the trial, I wish them as much success as I had. D. B.

ROSE GOSSIP.

Sphagnum & Co., Florists, Alaska:

GENTLEMEN—Your favor of the 2d inst. reached me this morning. You conclude your letter by remarking that the subject is now exhausted. This I cannot admit; it is too many-sided, and in my opinion is still open to dispassionate discussion. You assure me that out of 12,000 orders for plants filled at your establishment the past season two only gave rise to complaints. Mine, of course, was one of the unsatisfactory commands. Without for a moment presuming to contest the validity of your declaration, I shall beg leave to say that if the remaining 11,998 orders were filled in precisely the same manner in which mine was, then the fact you present fills me with unbounded amazement, for it necessarily implies that the American people are either most deplorably ignorant on the rose question or that they are the most patient and long-suffering race on the face of the earth; in fact, under such singular circumstances a scrupulous and painstaking florist would be "wasting his sweetness on the desert air" in supplying such a set of indifferent customers with roses correctly named. But in spite of the complaisant optimism of your patrons in accepting spurious stock without a murmur of dissent I feel confident the day is not far distant when all respectable firms will see their way clear to the great advantages of thoroughly establishing a sound reputation for correct nomenclature of roses and all other plants they may offer for sale.

I fancy most florists must originally have been amateurs, which I should judge to be the proper embryo state for first-class florists, who, before assuming the responsible functions of their exalted calling, have doubtless passed through all the ecstatic phases which are the common experience of sensitive and highly-constituted amateurs; hence the professionals should be endowed with subtle instinctive powers to discern the needs and to sympathize with the aspirations of their natural allies.

All real flower lovers have more or less experienced the thrilling delight of anticipation, the blissful day-dreams, the entrancing reveries and the exquisite phantoms of flowers of preternatural loveliness which fertile fancy places before them to cheer with buoyant hopes long before fruition has set her seal upon the limits of their desires, so that in reality the amateur worthy of the name enjoys his garden, sitting by the winter fireside, with a zest and delight almost as absolute as when radiant summer has crowned it with all her captivating glory. A great poet has sung in "glowing numbers" the "Pleas-

ures of the Imagination," and should any poet of the present day feel moved to add a supplementary canto to that famous work, and should he be in quest of suggestive material for the purpose, I would strongly advise him to consult an amateur florist, those privileged beings before whose inner consciousness there float such ravishing visions of bewitching beauty, clothed in a multiplicity of gorgeous and iridescent dyes. What a dreadful contingency to realize that such sensitively susceptible mortals should ever become the prey of merciless florists! For instance, the trusting amateur has set his heart, with unquenchable longings, upon the possession of a rose whose transatlantic fame has been heralded with copious eloquence by the horticultural press, and whose dazzling beauty has been extolled in a thousand catalogues. He often, alas! impecunious (*comme-moi*) has, perchance at the cost of comparatively great sacrifices, economized and scraped together means sufficient to order the coveted favorite.

But, alas! and a-lack-a-day! "Ah! The cruel pity of it." When the supposed treasure stands revealed, he realizes, with lacerated feelings, the delusion and mockery of which he is the unsophisticated dupe. His peerless Queen of Queens is, after all the solemn asseverations of the perfidious florist, but a buxom Madame Knorr, of which variety he already has three sturdy clumps. In such a case what can be said of the heartless man who could deliberately blast such radiant hopes—with rude hand dispel such legitimate and resplendent visions—who, with cynical effrontery, ostentatiously announces, in his deceitful though gorgeous catalogue, that he has for sale the very varieties he fails to furnish?

Nefarious florist! What language can be too severe to condemn treachery so great. Great Priestesses of Billingsgate! Shades of Sairy Gamp and Betsy Prig!!! your practised tongues, your pitiless sarcasm, your withering irony, your inflammatory invective and floods of smothering vituperation alone could do full justice to such an unregenerated culprit. He whose training and antecedents should enable him to comprehend the enormity of his conduct and to avoid it should not the pure visions of his happy, innocent amateur days come like guardian angels to stay his guilty hand and to curb his criminal *substituting* proclivities? But, no, "The man who hesitates is lost." He listens to the voice of the tempter and succumbs to his delusive wiles. A poor amateur implores him to send straightway, with "quick-

ness and dispatch," the incomparable Baronne de Rothschild. This lady, of high degree, is somewhat fractious as a cutting, and on that account is a variety the florist has avoided; in fact, he has never kept it, and never intends to do so, although it figures conspicuously in his veracious catalogue. He then reasons with himself: "Perhaps this chap'll never know the difference; let us send him Madame Alfred de Rougemont, neatly labeled, of course, 'Baronne de Rothschild,'" and thus the iniquity is consummated with a cold-blooded indifference that would put to shame the unblushing and brazen turpitude of a Don Pedro da Costa, of Lusiadas fame.

It is excruciatingly painful to be obliged to discuss another class of florists, and for that reason they shall be dismissed in briefest terms. I allude to those whose hearts are not in their work; who do not possess even a platonic affection for the regal rose and who regard their noble calling simply in the light of a mercenary speculation; who judge it from a commercial point of view alone, and who do not possess sufficient love for the rose to enable them to distinguish one variety from another, except it be labeled. It is not, then, surprising that such men should commit errors which, while they might be unpremeditated, would nevertheless be equally vexatious.

After having attempted to portray in extremely guarded terms and reasonably temperate language a few of the grievances to which amateurs are subject, a spirit of strict impartiality imperiously demands that I should also point out their shortcomings. It has been said that they are given to profanity. To this I reply what wonder that the angry passions of the cruelly disillusioned amateur should sometimes rise? Is it strange or incomprehensible that the atmosphere in his immediate vicinity should suddenly assume a lurid tint, a bluish tinge, or that weird, mephitic vapors should permeate the air? I shall not venture to affirm in a positive manner that the exasperating provocation he endures could possibly palliate a breach of any clause of the Decalogue. Oh, no; that would be going too far, and no doubt I should be, theo-

logically speaking, altogether wrong, but I shall stoutly maintain the existence of extenuating circumstances and that the responsibility of the transgression should be shared by the chief transgressor, to wit, the culprit florist.

In refusing to consider the conduct of the amateur as all *couleur de rose*, and in laying conspicuous stress upon his misdemeanors, it may be plainly seen by any unprejudiced florist that I am animated by a spirit of fair play and a sincere and burning desire that both parties should mend their ways—especially the florists.

I am fully aware that this communication exceeds the reasonable limits of an orthodox business letter, but I have been quite carried away by the subject, and though there still remain several points which might be touched upon with pleasure and profit, I shall spare you, and bring my letter to a close in a few parting words.

The question at issue (correct nomenclature) is bound to come to the front, and it is in the genuine interests of both producer and consumer that it should be thoroughly ventilated, in order that mutual confidence may be firmly established between those having interests in common. Above all things, florists should not blindly depend upon the supposed ignorance of their customers to palm off wares that have not been called for; nor should they announce varieties which they do not keep in stock.

As a matter of course, the strictures contained in this letter do not have a general application. No, indeed. Happily, the great body of men following the most refining and agreeable occupation in which it is possible to be engaged, are, as a rule, true gentlemen, enterprising, honorable and highly intelligent, and among them I count a few of my dearest and most sincere friends. Yet, were there but a single florist in all this broad land who was given to "ways that are dark and tricks that are vain," it would be well worth while to attempt to lead this erring brother within the fold of legitimate and straightforward dealings. Apologizing for the great length of my letter and sincerely hoping that the coming crops of Alaska may be both abundant and profitable,

I am, yours truly,

F. LANCE.

CALYCANTHUS.

IF I were obliged to decide which one of all the many desirable flowering shrubs I would select in preference to all others I might hesitate a long time, but should undoubtedly give first place to the calycanthus, otherwise known as "Carolina allspice," "strawberry shrub," "sweet-scented shrub," &c. (Perhaps what I have written will remind some readers of the negro justice, who, after hearing a case, said, "I shall take three days to consider this case, but shall finally give the decision in favor of the plaintiff." But never mind; what is writ is writ.) And why would I choose the calycanthus? Doubtless the very agreeable fragrance of its unassuming brown flowers has much to do with influencing the choice, but the shrub in itself has merit. It is perfectly hardy in New York and farther north; just how far, I

don't know; it is of easy culture, growing well anywhere even under unfavorable circumstances, but it well repays attention. It has large, bright and luxuriant foliage and gives in early spring a profusion of flowers of most delicious odor, resembling, more than anything else, the fragrance of fresh ripe strawberries, with which seems to be a combination of the aroma of other fruits and flowers so judiciously blended as to give the effect of all, while it is difficult to detect the individuality of any one. Pimento was called allspice, it is said, because it possessed the merits of all other spices, hence, probably, the name "Carolina allspice" given to the calycanthus in some sections. By judicious pruning a second flowering may be produced later in the season, but like the perpetual roses the first crop only is to be relied on. Such

as come afterward may be considered as extra dividends, prized perhaps the more for being unexpected. The bark of the calycanthus is highly aromatic and has not an unpleasant flavor.

Botanically, the calycanthus comes between the rosaceæ and the myrtle families, and besides the one of which I have written there is another genus, the chimonanthus, of Japan, with smaller leaves; the fragrance of its flowers resembles that of the pineapple more than the strawberry; it is valuable, but not so desirable as the American genus.

The calycanthus can be grown from seed and from root cuttings, but I have striven in vain to make new

plants from the suckers, that are abundant. The roots of these suckers, when detached from the parent plant, do not seem to have sufficient fibres to furnish them with food. Telling a friend of my failure in this direction, he said, "You don't begin soon enough. If, in the spring, you will uncover the roots, you will find buds already formed awaiting their time to push up through the soil and become suckers. Take these and bury them as deep or even a little deeper than they were before. They will continue in their endeavor to attain an existence above ground, and new fibres will form before the foliage has need of them." Acting on his suggestion, I have had no difficulty in propagating calycanthus. L. A. R.

A WOMAN'S GREENHOUSE.

I WAS greatly interested in looking through the greenhouse of a lady friend who has gradually built up quite a business in a village of three thousand inhabitants. Gifted by nature with a wonderful talent for arranging flowers and also a love for growing them, she began with a little house of one hundred square feet of glass, warmed by a small furnace with an old gas-main for a flue. Two years ago she built a larger house, sixteen by forty-four feet. Both of them are pits, that is, they are banked up so that two-thirds of the sides are beneath the surface. The larger one has an ante-room four feet wide, partitioned off at the north end, which opens at the east side into a boiler and furnace room, eleven feet by six feet, parallel with the greenhouse.

The tubular boiler is seven feet long by thirty-four inches in diameter and is placed in brickwork like other boilers. It is set so low that the top of the boiler is about one foot below the bench in the greenhouse. A hole is cut through the partition the length of the boiler and a cardboard apron as canopy above directs the heat into the greenhouse, warming the cutting-bed and helping to heat the house. Three one and a quarter-inch steam-pipes run from the boilers beneath the bench along the east side and across the south end, where they are merged into one which runs along the west side and crossing the house empties the condensed steam back into the boiler.

The same boiler warms six rooms in the dwelling-house, about thirty feet distant, the steam being conveyed in a pipe beneath the ground, and is distributed through radiators. An expense account kept during the winter of 1884-5 showed that it cost less to run this boiler, warming both house and greenhouse, than it did the previous winter to run a hard coal base-burner in the sitting-room. The fuel used was soft coal slack, purchased on board cars in the village at \$1 per ton.

Knowing that this lady grew both hothouse and greenhouse plants in the same room, I was curious to see the internal arrangement.

A bench thirty inches wide runs around the house, while in the middle is a raised bed five feet wide and thirty-two feet long. This is about eighteen inches high, and is composed of rich soil held in place by a board rim.

At the north end of the middle bed a few feet are

devoted to smilax and the rest to white and buff roses, a large La Marque rose being trained to a trellis standing at the south end.

Up in the ridge is a wide shelf on which some very fine stock coleus wintered nicely, and two hundred cuttings had just been placed in the sand at the time of my visit, February 16th.

At the north end of the east bench were a couple of fuchsias, started in December, then a few rex begonias, then five or six feet of cuttings. The rest of this bench was occupied by geraniums in five and three inch pots, the larger ones being chosen for their winter-blooming disposition. Across the south end most of the space was occupied by large heliotrope plants in full bloom and callas also blooming freely. They were crowded very closely but seemed to be thriving. In the southwest corner a few square feet were occupied by alternantheras just as they were bedded into the earth in the fall, while along the western bench were young plants of various kinds for spring sales, such as heliotrope, feverfew, variegated geraniums, flowering begonias, &c.

On one side of the door stood a large tub with a eupatorium, on which one hundred or more trusses of bloom were beginning to open, and on the other a pot of *Jasminum polica*, with its fragrant flowers mingling with the foliage of a couple of passion-flower vines, trained on the northern partition. Along the pathway stood a long row of stock geraniums, while among the roses and under the benches stood a great many plants that were useful in some way for the winter trade.

In a few days manure was to be put into the benches of the little house (which is not now run in the winter), and when it begins to heat, the geraniums, feverfew, young chrysanthemums and other bedding plants which do well in a cool temperature will be moved there to make room for the young coleus, achyrantes, begonias, &c.

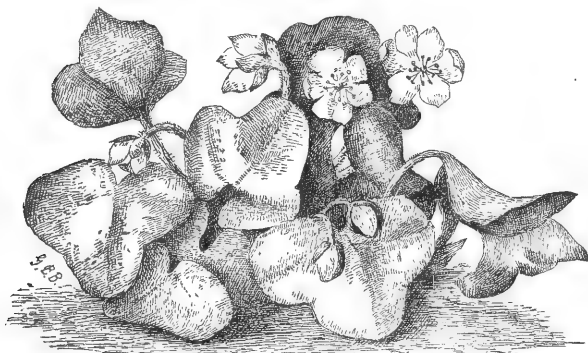
The little house will also be used for starting tuberose and storing verbenas, which will be brought in later in the season.

Of course this little greenhouse is supplemented by flowers purchased in a neighboring large city, but altogether it makes a profitable and pleasant occupation.

L. B. PIERCE.

SOME MASSACHUSETTS WILD-FLOWERS.

IN early April, before the snow is fairly off the ground the liverleaf, *Hepatica triloba*, pushes up through the brown oak-leaves, and unfolds its pink and violet petals to the warm sunshine and the gentle showers. It is our earliest, and perhaps our most beautiful, spring



LIVERLEAF (*Hepatica triloba*).

flower. Closely following it, and coming before it has done blossoming, is the bloodroot, *Sanguinaria Canadensis*, so named from the blood-red color of its root. Near a beautiful cascade in the heart of the Middlesex Fells it is found in great profusion, the white pearly blossoms peeping out like stars from the dark background of dead leaves.

By the first of May, and often before, the wood anemone (*Anemone nemorosa*) opens in the deep woods, where its shell-like cups of pink and white hide themselves from the sun, and blossom and die in undisturbed quiet. About this time there can be seen scattered over the meadows and lowlands great blue patches of *Viola delphinifolia*, the earliest violet. Soon comes a host of others, as *V. sagittata*, *V. ovata* and *V. pedata*, or the crowfoot-leaved violet, on the hillsides, and the white violets, *V. lanceolata* and *V. primulæfolia*, in the overflowed meadows. With them come the buttercups, rearing their golden chalices, all varnished and shining in the meadows and valleys, on the hilltops and on the surface of the ponds and brooks. In what direction can one look at this season of the year that he does not see a buttercup?—the most cheerful and contented of flowers, adapting itself to every locality. The 12th of May we go to Townsend, near New Hampshire, for trailing arbutus, *Epigæa repens*, "New England's pet flower." From under the dry pine-needles we pull up the long straggling stems, covered with large glossy leaves and starry clusters of the sweetest-scented blossoms—some pure white, others shading from pale to deep rose-pink. Of all the spring flowers it is the most welcomed, most loved and most sought after—one of the first that greeted our Pilgrim Fathers, and called by them Mayflower, after the good ship which bore them to this land of many flowers. Before May is gone, the procession lengthens

by company on company of flowers. Columbines, *Aquilegia Canadensis*, flame-colored and gold, nod and beckon from the gray rock ledges, challenging the passer-by to reach them if he can. It is a flower that loves solitude and grows where hardly any other flowers dare or care to. In the same localities as the columbine, though generally in rather more sunny places, the corydalis (*Corydalis glauca*) is found, a pretty little plant with finely-divided silver-green leaves and a pink-blossom, shaped like an elfin-cap, with a little yellow frill.

"The yellow violets dance as they unfold
In the blithe spring wind all their green and gold."

The meadows are again blue with houstonias or innocents, *Hedyotis carulea* (Gray). Going down into the swamps, we see as pretty a picture as any we have been looking at. The ground is a carpet of green moss, studded with the crimson blossoms of the fringed polygala, *Polygala paucifolia*, and all around us is a mass of purple bloom, the rhodora, *Rhodora Canadensis*.

"In May, when sea winds pierced our solitudes,
I found the fresh rhodora in the woods,
Spreading its leafless blooms in a damp nook,
To please the desert and the sluggish brook.
The purple petals fallen in the pool
Made the black water with their beauty gay ;

* * * * *

Rhodora ! if the sages ask thee why



BLOODROOT (*Sanguinaria Canadensis*)

TRAILING ARBUTUS (*Epigaea repens*).

This charm is wasted on the earth and sky,
Tell them, dear, that if eyes were made for seeing
Then Beauty is its own excuse for being."

—From R. W. Emerson's "Rhodora."

And now comes June with all her roses. The roadsides are bright with them, *Rosa lucida*, *R. blanda*, *R. nitida* and *R. Carolina*. Jack-in-the-pulpit is thrusting his head up among the reeds and rushes, along the edges of Dove's pond, and some six or eight yards from the shore yellow cow-lilies float on the dark water. Long ago there was a Catholic graveyard in the midst of the Middlesex Fells. Now no vestige of it remains, save, at this season of the year, there is a great hill pink with the beautiful rose acacia, *Robinia hispida*. So long ago that hardly anyone now living remembers about the cemetery, this flower was planted on some grave, and has spread, until now it is like a native shrub, covering the whole hill with a wilderness of rosy bloom. The air is heavy with the scent of white locust blossoms hanging in drooping clusters. The fields are white with daisies, white as though it had been snowing. The daisy is the children's flower, and although it is coarse and unlovely when seen close to, and cannot in any degree be compared to England's "wee, modest crimson-tipped flower," they all know it and love it, the rich and the poor.

Walking over the fells we see along the side of the path clusters of broom-rape, *Orobanche uniflora*, a leafless parasitic plant. A single white drooping blossom rises on a flesh-colored stem, and when a dozen or more spring from a common root they are beautiful indeed. Going again to the cascade, where we found the hepatica and bloodroot in early spring, we now see a miniature forest of wild maidenhair, *Adiantum pedatum*, and along by the stream that flows from the cascade, purple iris, *Iris versicolor*, blooms in profusion. In the woods, cornel and loose strife are open, and here and there are pink patches of wild geranium in the lowlands. Turning once

more to the Townsend woods, we find on the 25th of June that all the bushes and the underbrush, through which we struggled with so much difficulty when we came for mayflowers, have burst into bloom. All around us is a great forest of mountain and sheep laurel. Thoreau says of the latter: "How beautiful the solid cylinders of the lambkill now just before sunset, small, ten-sided, rosy-crimson basins about two inches above the recurved, drooping, dry capsules of last year, and sometimes those of the year before two inches lower." The sheep laurel or lambkill is very beautiful in its way, but the mountain laurel, *Kalmia latifolia*, far surpasses it. The bushes on the hillsides rise tier above tier, and, standing in a hollow and looking up, you seem to be in an amphitheatre composed of myriads of tiny cylinders, white, pale-pink and deep-rose. The flower is the same as that of the lambkill, only larger. Each stamen (there are ten) is fastened down into a little socket, forming on the outside of the flower a ring of points.

In the fields of grain, rudbeckia, a diminutive sun-flower swings on its slender stem, and in the pine bank's swamp the purple side-saddle flower *Sarracenia purpurea*, nods above its strange leaves, which are green pitchers holding about as much as a wine-glass. Above the opening is a drooping canopy, and round the edge of the mouth runs a red cord, all the time exuding a sweet, sticky juice. Down the side of the pitcher runs a little wing carrying the red cord. An insect, attracted by the sweet juice, creeps up the cord until it reaches the top of the pitcher. There there are reversed hairs, and after it falls in, which it generally does, having become intoxicated by the liquid, there is no escape, and it is slowly digested by the plant. [Upon this point we differ from our correspondent.—E.D.] Often pitchers may be seen half filled with liquid, and a dozen or more flies and other insects in all stages of digestion.

July now rolls back her portals, and we see the wet grounds carpeted with blue forget-me-nots. White azalia (*Rhododendron viscosa*) fills the air with its perfume. In the swamps are clusters of yellow lilies, calopo-



WATER-LILY
(*Nymphaea odorata*).

lily-of-the-valley, both in shape and perfume, that a careless observer has been known to mistake it for that. The fields are full of clover, pink, yellow, white and the soft gray rabbit's-foot. White spiræa (*Spiræa salicifolia*) and pink hardhack (*Spiræa tomentosa*) are opening in the woods and meadows. A great bank opposite the window where I am writing is covered with succory (*Cichorium Intybus*), and black-winged yellow birds are continually flying to it for the seeds, of which they are very fond. One would think, looking from a little distance, that a piece of the sky had fallen and spread itself over the bank, so blue are the flowers. The hills near Salem are golden with the woad-waxen (*Genista tinctoria*). It is not found anywhere else in the State, and is called by some people witches' curse, because after the witches were hung it sprang up on these hills, and has lived here ever since, so the story goes.

Walking through Wallace's Ravine we see snowy and pale buff-colored Indian pipes (*Monotropa uniflora*) growing on the roots of the pine and beech trees. An exquisite white-fringed orchis (*Orchis blephariglottis*) also blossoms here, and red-spotted lilies (*Lilium Philadelphicum*) glow like little fires under the trees. Jewelweed (*Impatiens fulva*) is all in blossom along the shores of the ponds, and children are delighting themselves by dipping its leaves into the water, and watching them turn, one side gold and the other silver. Yellow and purple bladderwort (*Utricularia vulgaris* and *U. purpurea*) brighten the muddy, drying up ponds. Thoreau says the yellow "is a dirty-conditioned flower, like a slut-tish woman with a gaudy yellow bonnet." One last look

gon and pogonia, two exquisite pink orchids, and there, too,

"Mid the wild moor and silent glen,
The sundew blooms unseen by men;
Spreads there her leaf of rosy hue,
A chalice for the morning dew."

The catchfly, a little scarlet pink-like flower, brightens the fields of dying grass. Pine banks are covered with rattlesnake plantain. It is, as Thoreau says, "of very simple form, but richly veined with longitudinal and transverse white veins. It looks like art." Near it grows the pyrola, or false winter-green — a spike of white drooping bells so closely resembling our cultivated

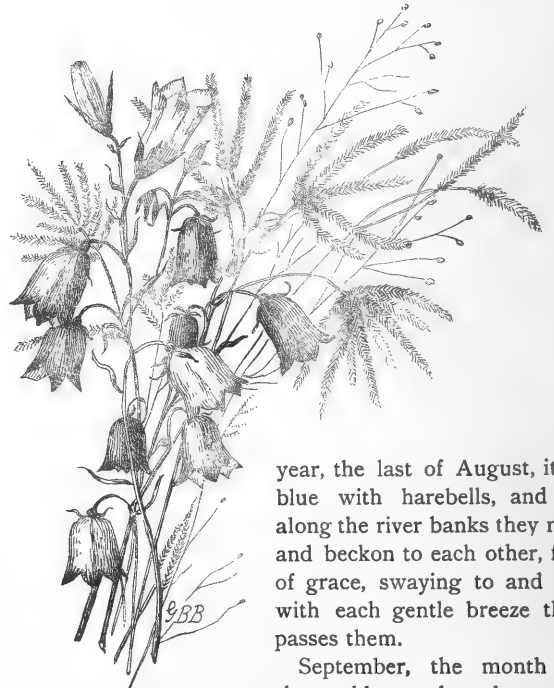
at her loveliest flower, and July is gone. We rise about three in the morning, and row up the Charles River before sunrise to see the water-lilies open. It is cool, quite dark and intensely still, save for occasional bursts of song from the thickets on either side of us. Near Newton we land, sit down on the bank and watch the sun rise. The river is perfectly calm, and thousands of lily-buds float on its surface. In about a quarter of an hour the first one begins to unfold its pearly petals, and in ten minutes more we can count a dozen fully open. One cannot imagine what a beautiful sight it is to see them unfold, so gently, so quietly. In them lies the very essence of calmness and tranquillity. Their name, *Nymphaea*, signifies nymph or naiad of the waters.

August now steps to the front, bringing with her the cardinal flowers, *Lobelia cardinalis*. No flower of summer is so splendid, so rich and glowing in its color as this, a cross between crimson and scarlet.

"And in the marshes and low, wet places
The cardinal flowers burned red,
As if some wild-wood thing were wounded
And here its blood was shed."

Down on Cape Ann the sea-coast golden-rod (*Solidago tenuifolia*) waves above the granite rocks, and along the roadsides the ground-nut vine (*Apios tuberosa*) hangs out its clusters of strangely-colored flowers, crimson, pale salmon and gray. In the twilight, just as the moon is rising, the evening primroses (*Oenothera biennis*) open. They are little moons on earth, living but a single night and fading with the sunrise. The clethra (*Clethra alnifolia*) fills the swamps with its over-sweet perfume, and ladies' tresses, white spiral orchids, are scattered through the lowlands.

Deer Island, in the Merrimack River, is the home of one of our well-known writers. At this season of the



HAREBELL
(*Campanula rotundifolia*).

year, the last of August, it is blue with harebells, and all along the river banks they nod and beckon to each other, full of grace, swaying to and fro with each gentle breeze that passes them.

September, the month of the golden-rod and asters, now joins the already long

FRINGED GENTIAN (*Gentiana crinita*).

procession. The sides of the railroad track are bordered with jointed polygonum (*Polygonum articulatum*) a

delicate plant, with tiny flesh colored blossoms. The woods are full of splendid yellow gerardia (*Gerardia pedicularia*) and there are also great quantities of the low pink gerardia, *G. tenuifolia*. White snake-head (*Chelone glabra*) rears its strange blossoms in the wet woods. It is named from its resemblance to the head of a snake. The stamens, cohering by the anthers, form the tongue, which seems ready to dart out from the gaping lips at any moment. Now, the flower of sunshine, the golden-rod, holds sway over field and forest, moorland and prairie, royal in its color and bearing, brightening the homes into which it is carried, and shedding sunlight whenever it is found. There are over forty different species of golden-rod, many being found in Massachusetts. Some of the commonest are *Solidago Canadensis*, *S. speciosa*, *S. altissima*, *S. nemoralis*, the starved golden-rod, *S. bicolor*, white golden-rod, *S. lanceolata*, and many others.

Let us look now for a moment at the asters, white, deep violet, and all shades between. There are very many of them. Some of the handsomest purple ones are *Aster patens*, *A. undulatus*, *A. Novæ Angliæ* and *A. dumosus*. Three of our commonest white ones are *A. corymbosus*, *A. sagittifolius*, *A. multiflorus*. One more flower and the procession has passed. About three miles from Wakefield there is a meadow full of the blue-fringed gentian, *Gentiana crinita*. Bryant writes to it:

"Thou waitest late and com'st alone,
When woods are bare and birds are flown.

* * * * *

Then doth thy sweet and quiet eye
Look through its fringes to the sky.
Blue—blue—as if that sky let fall
A flower from its cerulean wall."

MARGARET W. LEIGHTON

FARMERS' GARDENS.

WHERE are they? Not on the farm; not in the heart or understanding of the farmer. Why? We cannot answer for farmers in general, because we have no patience with men that so generally neglect their own personal comfort, luxury, wholesome food and pecuniary interest by doing without a garden, and therefore do not ask them the simple question. If we did, we should hear them say that in spring-time they have too much other work; the farm crops are of more importance and require all their time and attention. In consequence of such a decision there is but one hope left for a garden, and that hope dwells in the heart of the housewife, but whether it will ever ripen to fruition is a question. It will, if she has physical strength sufficient to do the house-work, attend to the dairy, and care for her own and the children's clothing. Perhaps there will be, then, in some unfit, partially shaded, cold corner, a small piece ploughed up, in which she can plant a few seeds, in the hopes of having some early (?) vegetables.

While this is being done, what is the farmer doing? He is getting his corn ground ready, in part, and ground

ready for other crops, when he does not have to go to the post-office, village store or blacksmith shop. And here is a peculiar fact about the farmer's habits, or probably misfortunes; his post-office is two miles to the west, his blacksmith two miles to the east, and the depot two miles to the south, so the poor man is being constantly taken from his work. But the good wife has no such trouble (?); she has nothing to interfere with her business, and therefore can accomplish a wonderful amount of work.

Now let us look at the profit of the farmer's work. An acre, if well cultivated and liberally enriched, will yield from forty to fifty bushels of shelled corn, the cost of producing which will be fully one-half of what it will bring in the market, and during winter it will take two-thirds of the other half to feed the horses that have done their share of the work. This will leave the farmer, say, eight dollars per acre profit. Let us contrast this with the profits to be derived from the garden, not imaginary profits, but real ones. And to be plain, we will give the result of our own experience, as the writer is a farmer, and has a garden, a good one; an acre that yields more

profit than any ten that are devoted to ordinary field crops. We take an oblong piece of ground, convenient to the house, and three times as long as it is wide; we enrich it well, plough deeply and harrow finely. Instead of having beds, we plant all the seeds in rows running the whole length of the garden. On one side we commence with a row of blackberries and raspberries; next, a row of currants and gooseberries; then two or three rows of strawberries; after that vegetables in order, peas, potatoes, corn for roasting ears, beets, onions, tomatoes, in short a full line of garden vegetables. From this acre we have a constant supply of vegetables and small fruits, not only for the summer but for the whole year. Where the peas and early potatoes were grown we sow turnips, beets and put in celery plants, sufficient to last all winter, while the small fruit plants yield enough for the table and for canning purposes as well. The tomato-vines give us all we want to can for the season. From our acre we have at least two quarts per day of something for the table for every day in the year. It takes but a poor scholar to estimate the value of the acre for the family's use. The cost of working the garden is no more than that of working an acre of corn, as the work is very nearly all done with a horse and cultivator; if these are used intelligently but little other work is required,

and to do this well it does not require half a day each week to keep the garden in perfect order.

There is an additional profit to be derived from the garden that cannot be computed in dollars and cents. It is the moral and intellectual influence that makes it truly profitable. We don't want our boys to think there is nothing on the farm but pork, potatoes, cabbage and hard work. On the contrary, we want them to feel and know that labor on the farm, rightfully employed, will furnish as many or more luxuries as can be found in other pursuits. We think a good garden is a good teacher, and a profitable one. It contains many object-lessons which tend not only to build up character, but to increase a love for the farm and for the home.

So much for a vegetable garden, to which will be added a flower-garden, if the wife's wishes are consulted, as they should be, for she unquestionably bears the burden of a farmer's life; she suffers the most hardship. At the same time she is cheerful, contented, industrious, enterprising and seeks to draw around herself objects of taste and beauty to decorate and cheer her husband's and her children's home. Farmers, for once try and have a respectable garden, and see how much it will increase your stock of domestic happiness.

FLORAL DESIGNS.

THE same underlying principles apply to cut-flower designs as to bouquets, with the exception that the former must follow some preconceived idea, while the latter depend in form and arrangement on our own taste. We evolve their arrangement from our inner consciousness. Nor are they so mutable in form as bouquets; a funeral design of 1876 would pass muster now, a bouquet of the same date, never! Of course, year by year, the florist is adding new designs to his stock, but the primeval forms of wreath, cross, &c., remain the same.

Some of our importers have attempted to introduce those hideous arrangements of immortelles and beads so familiar in foreign cemeteries, but they are never likely to become popular; no self-respecting American ever commemorates his dead by a wreath of yellow bugles, with "To my Friend" across it in painfully shiny black beads. Some peculiarly flagrant atrocities in this line were shown at the American Institute Fair last year. I don't know whether the exhibitor received any award—I should have been tempted myself to have given him a year in solitary confinement.

Apart from new designs, the greatest innovation of late years is the introduction of colored flowers in funeral pieces. This certainly robs these designs of their peculiar significance, but it is a great gain artistically. It is a gain professionally, too, for before this convenient fashion was introduced the florist was often put to great inconvenience when white flowers happened to be scarce. I know a certain ingenious florist in a Western city who is in the habit of informing his patrons, whenever scarcity of flowers compels him to devise some startling novelty,

that it is the latest New York fashion. Some years ago he introduced *scarlet* into his funeral designs as an Eastern novelty, and this idea met with such favor that all the florists in that town have followed his example.

Pink and lavender are the favorite colors in this work, though yellow seems received with some favor. At the funeral of the late General Hancock a number of colored designs were displayed, a golden crown being specially noteworthy. Another noticeable design was a bleeding heart of heliotrope, with a long graduated garland of Jacqueminot roses to represent the blood. It was doubtless a clever piece of work, but cannot be regarded with approval from an artistic standpoint. Judging from what we see and hear, the fashion of funeral flowers has taken a fresh growth, for they have been used of late in great profusion, and in many novel ways. Both bier and pall are now made entirely of flowers, a very beautiful idea, and a very costly one, whereat the florist proportionately rejoices. The frame of the bier is, of course, wire; that at General Hancock's funeral was massed with white carnations, on which were laid loose bunches of Mermet roses. The flowers composing a pall are, I am told, arranged on a muslin foundation, but I have not seen this design during the progress of making.

Of pillows, crosses, anchors and wreaths, lettered and unlettered, we have had a surfeit, though the crescent wreath is certainly pretty. It is like a rounded crescent, the tapering ends tied together with white ribbon. We can recollect the sensation which the first "Gates Ajar" design produced, though this has now become one of the stock pieces. The "Wheel Broken at the Fountain"

was another suggestive design, though this, requiring an entire text in lettering, is rather a troublesome thing to make. As a matter of personal taste, we think that much lettering is a mistake; in fact, we would dispense with it whenever it is possible, considering that it detracts from the harmony of the design. However, a large flat surface, such as a pillow, cannot well be finished without it. It is tedious work at best, and many are the expedients devised to render it easier, in the way of ready-made letters, words and sentences, but these are never so satisfactory as the old way. Apart from working in the letters, stemming immortelles is about as exasperating as any occupation an harassed florist can indulge in, as the writer knows by sad experience.

But we must not for a moment imagine that the greatest use of set designs is in funeral work. There is not an incident in life which may not be marked by some graceful tribute of this nature. It is the correct thing now to celebrate the advent of a little stranger into the family circle by some floral emblem, a decided advance on the old-fashioned presentation of a fat pincushion bearing the inscription, "Welcome, Little Stranger," in shining pins. A favorite design is an embroidered baby-blanket, lightly pinned together, to hold a loose bunch of flowers in its folds. A floral cradle, or a cornucopia filled with graceful sprays of the pretty little fragrant olive, is also appropriate to the same occasion. The most peculiar idea we ever saw for such an emblem was a very large pillow, bearing the legend, "My dear Mrs. Brown, Heaven bless you!" Needless to say, this was the purchaser's idea, not the florist's.

Apparently, there is no such word as impossible in the florist's dictionary, as regards floral designs; if the Paleontological Society demanded a floral counterfeit of the famous Jabberwock, it would doubtless be supplied, teeth, tail and all. Every social club or trade society must have appropriate floral emblems nowadays, and this leads to the creation of some very odd designs at times. For example, the "Brakemen's Brotherhood" demand a brake-rod and wheel, surmounting a base bearing their monogram, while the "Brotherhood of Locomotive Engineers" demand a complete engine, with its tender, making a decidedly unique piece. We cannot say what the "Locomotive Firemen's Brotherhood" would consider most appropriate to their calling, but there seems nothing left for them but a coal-shovel and oil-can. A ship under full sail, while not at all uncommon, is a very dainty piece of work, requiring both skill and patience. All the beasts of the earth and fowls of the air are represented in flowers; one design we have

in mind being a huge elephant of carnations, its flapping ears represented by leaves of begonia rex, while it bore a rosebud howdah on its back. Another peculiar design was a terrestrial globe, bearing the outlines of continents and islands in colored flowers. But these very odd designs are more to be admired for dexterity of workmanship than for actual beauty; they often possess very little of the latter quality. For that matter there is very little actual beauty in a floral wish-bone; it might be almost anything as far as appearance is concerned, but it is now often used in place of the time-honored marriage bell; the bride and groom stand beneath it to receive the congratulations of their friends. In place of the popular canopy, at home weddings, the bridal party now stand in front of a screen of plants and flowers, which becomes a very charming decoration under the hands of a florist possessing artistic feeling; not that we would for a moment insinuate the absence of that quality in any member of the profession. A similar style obtains in church weddings, where the reredos is covered with flowers, while the chancel seems overflowing with fragrance and bloom. If the present beautiful style of decorating one's self and one's gown continues to grow *ad libitum*, in a year or two's time the fashionable woman will call for the services of the florist as she does for the hairdresser, and we shall read in the society papers that Mrs. So-and-so was beautifully decorated by Messrs. Dash, while Mrs. Some-one-else was exquisitely designed by Messrs. Blank. We think this opens up a very promising field of usefulness for our fellow-professionals.

Everything we said about bouquet-making last month holds good in making up designs, with the single exception that in the latter case you are more or less restricted in form, though not in arrangement. In making designs, manual dexterity certainly has as much to do with it as natural taste, for taste without the professional aptitude born of use is even less satisfactory than aptitude without taste. This is rather a Philistine sentiment, but nevertheless true. The same rules for flowers and accompanying foliage may be followed in bouquets and designs, though in making a large design you can afford to be a little more reckless than in a bouquet. We may observe that the useful smilax, once chief setting of a design, is now used merely as backing; any visible green must be asparagus, ferns or ivy. Colored leaves are much used, the coleus Golden Bedder being very effective, with its bright yellow, while many greenhouse and hot-house plants are robbed of their leaves for the same purpose.

E. L. TAPLIN.

CLIMBERS AND THEIR USES.

THE following earnest and just plea for our native climbers, by Prof. L. H. Bailey, of the Michigan Agricultural College, we most heartily indorse and would advise all who desire beautiful effects in gardening to read carefully and plant as recommended:

"Climbers are nature's drapery, They veneer the

most attractive natural pictures. They also present many interesting features aside from their highly decorative habits. We look upon them as curiosities of nature, since Darwin has given us his monumental work upon their habits and movements. We think of them, also, as specialized forms of vegetation, as plants peculiarly adapt-

ed to their surrounding tangles by their ability to reach sunlight in the face of great difficulties.

"Many more plants can grow upon a certain piece of ground, if a part of them are climbers, than if all were stiff stemmed. Herein lies nature's purpose in creating the climber. Utility here, as elsewhere, is apparently the first object. But the useful has been made the beautiful. Utility is adorned. Nature always adorns her most practical ideas. Here is a suggestion to the farmer :

"For the purposes of study the botanist divides climbers into twiners, tendril climbers and scramblers. The cultivator makes the same division when he provides supports for his plants.

"The first and most important use of climbers is to furnish a cover for outhouses and unsightly objects. Here we commonly prefer the tendril climbers and the scramblers. We desire plants of loose habit, for we must disguise as much as possible the shape of the object we conceal. For covering high objects of this nature, I know of no plant so good as the hop. The luxuriance of its growth, the pleasing cleanliness of its foliage, the careless but still attractive style of growth and the fragrant balls, all combine to render the plant valuable for ornamental purposes. I should prefer it to any other plant for covering a rear porch. I like the common things of life; they are not generally appreciated. Many people never enjoy beautiful things, because they are looking too far away for them.

"My next choice among woody climbers for covering large objects is the Virginia creeper. Its autumn coloring is attractive, although often too dull and monotonous for the highest effect. For this reason some other woody climber should be planted with it. The best I know is the common bitter-sweet, or waxwork, whose foliage of green and yellow contrasts pleasantly with the heavier colors of the Virginia creeper. But while the creeper is a tendril climber and readily ascends a wall, the bitter-sweet is a twiner, and must be provided with some support. This bitter-sweet is the plant which so often constricts the trunks of saplings. The fruit of the bitter-sweet, light-colored and crimson arilled, clings to the plant after the leaves fall, and makes an attractive display. The habit of the plant is not always good, however, and I should plant it in company with other climbers or among a continuous mass of foliage.

"The common wild clematis, or virgin's-bower, which clambers over low shrubs and fences, is always desirable for screening low objects. An especially desirable feature is the lateness of its flowering. It is not until August that its small, chaste flowers, borne in profusion, delight the copse and fence row. The flowers are of two sorts, some male or sterile, and others female or fertile. The fertile flowers give place to curious balls of feathery wool, whence the name "Old man vine" in some localities.

"For tropical effect none of our hardy climbers are so desirable as the Dutchman's pipe, *Aristolochia siphon*. Its great heavy leaves are often a foot or more across. It is a luxuriant grower, a woody perennial, and in most places hardy. This is very desirable for training over one end of a front or side porch. It is the best of all our climbers for affording shade. The plant grows

wild in Pennsylvania and Kentucky, but is grown by all nurserymen.

"For covering the side of a dwelling nothing is so desirable as the so-called Japanese ivy, commonly but incorrectly known in trade catalogues as *Ampelopsis Veitchii*. It is much superior to our native ampelopsis or Virginia creeper for this purpose, from the fact that its tendrils are much shorter, causing it to cling tighter to the wall; it is not loosened by winds and it makes a more compact and continuous covering. It commonly needs some protection for the first two or three years. Its autumn color is a rich bronze.

"For plants to grow on racks or trellises the best is the prairie rose. Some of the exotic clematises are very gaudy and in every way desirable. They are to be encouraged on account of their late blooming. Some of the honeysuckles will always be favorites for this purpose.

"For small trim plants in the flower garden, or as single ornamental objects, some of the more delicate herbaceous climbers are most desirable; for this purpose the plants should be grown in masses. Last year I planted four compact arbor-vitæs, four feet high, in a little plat thirty feet from my window, and I then scattered a few seeds of morning-glories among them. The twiners soon covered the little trees with floral wreaths, and the effect was delightful. I shall keep the trees trimmed back and repeat the operation in years to come. This year I shall add a few vines of the delicate little *Adlumia* to my group. Why do we not appreciate this delicate plant more? I have been charmed to see it growing wild in brushy thickets in Western Michigan, covering the little undershrubs with festoons of dicentra-like flowers. It demands a cool and somewhat protected situation.

"I have also been much pleased with the exotic heart-seed or *Cardiospermum*, known to the tender-hearted as love-in-a-puff. I simply stuck the seeds in the ground one morning in May and hurried away to look after more practical beets and cabbages. I gave the plants no attention, but they made a luxuriant growth and produced their great inflated fruits in abundance. It is a delicate herb, the heart-seed, and surely worth a place in the garden. I kept one plant cut back and gave it no support, and it made a straggling but attractive heap of green.

"The ground-nut, or *Apios*, is a curious, bean-like vine which grows abundantly in our thickets, producing peculiar clusters of chocolate-brown, pea-like flowers in July. I am going to try it in my garden. This plant also gives promise of affording a profitable, edible tuber.

"I must not dismiss this subject without inviting attention to the wild yam, *Dioscorea*, which grows in many of our thickets. It is a perennial herb, the cleanest in appearance of all our climbers.

"If you have trees upon your lawns with high and unsightly trunks, plant a Virginia creeper near to cover them. Do not introduce single high objects covered with climbers into an unbroken lawn. An old stub covered with a mingled verdure of Virginia creeper and bitter-sweet is desirable among trees, but never in an open lawn, unless it has an immediate background of high verdure."

EASTER-TIME.

THE shadows of winter, so chill and so gray,
Have passed from the meadows and hill-tops away ;
There's a shine in the skies,
Born of Spring's merry eyes,
And the heart of the Earth grows softer each day.

See how she releases from fetter and chain
Her treasures, which spring into freedom again,
Till with beauty and bloom
And sweetest perfume
Is filled every hill-side and meadow and lane.

But fairest of all things that blossom and grow,
Sweet as the summer and pure as the snow,
Is the lily, that tells
Like the glad Easter bells,
Once more the sweet story which all hearts should know.

Bloom out, Easter lilies ; bloom brightly and fair ;
Breathe out your pure fragrance upon the mild air ;
Fling your banners so white
Gayly out to the light,
For past is the lenten of sorrow and care.

For oh ! with the spring-time the Easter is born ;
Out of darkness and night springs the glad welcome dawn ;
And Easter bells ringing,
Their Easter song singing,
With loud jubilation hail Spring's sunny morn.

—*Selected.*

KITTY'S HOUSEKEEPING.

PART I.

"HURRAH ! Kitty, the very jolliest thing has just happened !" exclaimed Tom Rollins, bursting noisily into the room where Kitty Rollins, *née* Deming, was feeding her canary and solemnly lecturing a lively black kitten for looking too longingly at her feathered pet.

"What is it, Tom ? don't keep me in suspense a moment," cried the little wife eagerly.

"The boss told me this morning that I might have two months' vacation this summer in consideration of the extra work I did when he was sick in the spring. I am to have July and August ; what do you think of that ?" and Tom, who was the hard-worked bookkeeper for a city firm, looked as if he had received at least a ten thousand dollar legacy.

"Isn't it splendid of him !" cried Kitty. "Now we can go to St. Botolph's and keep house instead of boarding in some hateful place," and she rushed at Tom with extended arms, and that excited individual caught her in his own, and forthwith commenced to whirl her about the room in a maddening polka, in the course of which he trod on the kitten's tail, and Kitty's skirts switched a small table over on which was her basket of thread, needles, balls of yarn and other such impediments. The next the merry dancers knew their ankles were entangled in that yarn and they lost their balance and fell heavily to the floor, where they sat laughing immoderately and unwinding the yarn when there came a peremptory knock at the door.

Tom hastened to open it and was confronted by a servant with a message from Mrs. Symes, who occupied the floor below.

"If you please, sir," said the girl, "Mrs. Symes says her head is very bad and she really cannot endure such an earthquake overhead ; she can bear most anything in the way of noises, since she has grown accustomed to them from your being here, but an earthquake is too much."

"It's impossible to deny," answered Tom, "that an earthquake overhead is entirely out of place and must be very annoying, but if you will kindly inform Mrs. Symes that the earthquake is soon to depart for the country, to be gone two months, I think the information will relieve her head."

"She'll be as pleased as we are about it," said Kitty, with a giggle, as the door closed.

"It is really delightful to consider how much pleasure it is in our power to confer on our fellow-boarders," remarked Tom, complacently.

And after a few more pleasantries the young couple set themselves to making plans for housekeeping.

They had been married about five years and had boarded all that time. Mrs. Deming had died a few months after Kitty's marriage, and when the pretty cottage home in the academical village of St. Botolph's became Kitty's, she had packed away her mother's bedding and table linen, distributed the silver among the neighbors for safe keeping, and rented the house, hoping sometime to come back to it. It happened at this time to be empty and Kitty rejoiced in the prospect of "going home" once more.

It was the second day of July, and as hot and dusty as that month could make it, when the silence and loneliness of St. Botolph's, from which the students had already

taken their flight for the summer vacation, were broken by the arrival of the stage-coach which ran to and from the nearest railroad station. Conspicuous on top were Tom and Kitty, the latter bowing and smiling as she passed the familiar houses and saw familiar faces at door or window, and even calling out a merry salute to each person whom they met on the street.

"I wouldn't, Kitty," demurred Tom, as that thoughtless young woman merrily challenged Deacon Jones to a game of croquet at sunset, "especially if my nose was smutty, like yours, and cinders were piled in the corners of my eyes."

"The pot should never call the kettle black," retorted Kitty, drawing one finger across his forehead and holding it up black before his eyes.

Soon the coach rumbled up to the door of Kitty's old home and while the driver was taking off the trunks, the irrepressible Kitty dashed across the street and into the opposite house, where she was hugged and kissed by the whole family, from the white-haired old grandfather down to the two-year-old baby, who had never seen her before, and then she went flying back with the key which had been left there when her tenants went away. Then Kitty flitted from room to room of her old home, half laughing, half crying, at sight of the old familiar furniture, and while Tom struggled with the various dampers of the kitchen stove in a vain effort to make a fire, she fluttered out at the side door and across the garden to the house of Mr. Parsons, the minister and her nearest neighbor. She hugged and kissed the minister's wife and babies (the minister only escaping through his absence), and inquired after all their belongings from the old horse in the barn down to the latest brood of chickens. And the minister's wife snatched up a tin of biscuit, hot from the oven and ran back across the garden with Kitty to find that another neighbor had brought in a pot of steaming hot tea, while a third was at the door with cake and strawberries, and soon came a fourth bringing Kitty's spoons and a fifth with her knives and forks, and a sixth with her tea service, and it seemed as if Kitty's home-coming was making as much stir in the little village as did the coming of the three hundred and odd students at the commencement of a term.

St. Botolph's was not a large village and owed such importance as it possessed to the presence in its midst of the flourishing academy. Kitty's house was about midway of its one long street, and she claimed the whole village as neighbors. Every morning the doors and windows were thrown wide open and kept so until a late bedtime, giving the house a breezy and hospitable air that was very attractive, and Kitty in her long work-apron and coquettish cap would be seen now at this door and now at that, and then at a window, as she flitted from room to room with broom or duster, intent on keeping her little home tidy, and singing like a lark as she worked. With the freedom of country manners she ran in and out at the neighboring houses many times a day, sometimes to chat a few minutes out of sheer friendliness and often to consult older housewives as to the best ways of doing things. For it must be confessed that Kitty's housekeeping did not proceed with the ease and simplicity that the inexperienced little

woman had anticipated. It was the cooking that troubled her. She tried at first to do as she remembered having seen her mother do, but after Tom had eaten indigestible pies, smoky steak and soggy bread for two weeks with a courage and patient endurance worthy of a better cause, he mildly pointed out to her the possible benefits of appealing to the experience and skill of older and wiser cooks. But in spite of the minute directions she received and the long-tested recipes that were given her, the materials with which she experimented continued to turn out very mysterious and unpalatable dishes, which Tom was often called upon to bury in the garden under cover of the night.

"Tom, I wish you would look here a minute and tell me if you think this pudding is done," called Kitty one day, kneeling beside the oven and gazing into its depths with much interest and perplexity. "It is a custard pudding, and I know they need to be baked just enough and not a bit too much, and that is all I do know."

"I can't tell whether a pudding is done or not unless I eat it, or bury it; in either case it is apt to be finished," replied Tom.

"Then I shall take this over to Mrs. Ellis and ask her if it is done," and Kitty took a cloth and, taking the pudding from the oven, started across the street to Mrs. Ellis. But the cloth proved too thin and the dish grew hotter at every step, and by the time Kitty reached the middle of the street she could hold on no longer, but dropped the pudding, dish and all. Mr. Parsons' hens, who were peacefully exterminating grasshoppers by the roadside, and who had come to regard Kitty as their special providence, quickly gathered around her and embraced the opportunity offered by the pudding, which was fast cooling in the lap of Mother Earth. Tom, who had followed Kitty to the door when she left the house, threw himself into the hammock under the trees and laughed uproariously.

"Is the pudding done, Kitty?" he called. "I say, is that the regular orthodox way to finish a pudding, or is it a new invention of yours?"

"What on earth are you doing now, Kitty!" exclaimed Mrs. Ellis from her door, whither she was drawn by the sound of Tom's merriment.

"I'm feeding the minister's hens, like the good parishioner that I am," answered Kitty.

"When people feed hens on broken crockery they usually burn and pound it fine first," remarked Mrs. Ellis dryly.

"Pity you hadn't given me that bit of information five minutes sooner," retorted Kitty, as she ran back to her own premises, where her first act was to pull the pillow from beneath Tom's head, as he lay in the hammock, and attempt to smother that unsympathetic creature. Tom snatched the pillow away and sprang from the hammock, while Kitty fled around the corner of the house, closely pursued by her laughing foe.

"Tom, do come here a minute," called Kitty, about nine o'clock one evening. The voice came from the pantry, and Tom, who was sitting meditatively in the side porch, betook himself to that locality without delay.

"This jar of yeast is spoiled, Tom," announced his partner, "it will have to be buried; just smell it, will you?" Tom readily approximated his nose to the yeast jar, but instantly withdrew it, exclaiming:

"Whew! what horrible stuff!"

"Take it out and bury it, that's a good fellow; it smells so fearfully I don't want to throw it out on the ground." "I don't know where to bury it," said Tom, doubtfully, "I've dug graves for your messes all over the garden already; I feel as if we were living in a cemetery." "You might bury it where you planted those beans that never came up," suggested Kitty, "maybe they would rise at once."

"They would if they 'knew beans,'" said the troubled grave-digger. "Beans, turnips, or cabbage-head, whatever I was, I would 'get up and get' if the vile stuff came near me," and, holding the jar at arm's-length, Tom took a spade and retired to the garden, while Kitty ran over to borrow some fresh yeast from Mrs. Ellis.

When Kitty made her appearance the next morning her bread had risen up so that it had lifted the pan which had covered it. She stirred it down and, covering it with a cloth, left it on the shelf before the window, which as usual was open, intending to mold and put it in pans immediately after breakfast. But after breakfast Tom started on a fishing excursion with Mr. Parsons, and Kitty must see them off and throw a slipper after them for good luck. Then it occurred to her that Mrs. Parsons was to take her to ride that afternoon and she had forgotten at what hour she must be ready, so she flitted out at the side door and through the garden, leaving the gate open behind her, and in at Mrs. Parsons' side door. When she came out, Mrs. Ryder, who was walking down the street, called to her, and she ran out at the minister's front gate to reply, and the two went on together to Kitty's front gate. Then Mrs. Ellis called to her from across the street and over went Kitty to hear the news from the Northrups, who were traveling for the summer. While there she engaged in a frolic with the baby and forgot how fast the morning was passing.

"I suppose, Kitty, your house is all open for the convenience of any tramp who may be passing," remarked Mrs. Ellis, after Kitty had stayed long enough for all her household goods to have been carried off by any thief of industrious habits.

"Certainly," rejoined Kitty, "every door and window is wide open, except a few upstairs. I never thought of tramps, and Tom is generally at home. I declare, I shall be afraid to go back alone. Some of you will have to go with me to see that no one is concealed in the house."

So Kitty started across the street with the baby toddling at her side, and four children of different ages and sizes gathered about her as a body-guard, while the old grandfather, armed with a stout cane, led the van, and Mrs. Ellis, broom in hand, stood in her front door, laughing at the small army and ready to go over in the capacity of reinforcements if there should be a battle.

Kitty stepped rather gingerly over her threshold,

glanced fearfully into her cheerful parlor, where the breeze was blowing the muslin curtains into the middle of the room, and was entering the dining-room when a noise startled her. "Did you hear that?" she asked of the grandfather, who had fallen behind to allow her to precede him into her home.

"We did," said the children in low, whispered tones, in which awe and enjoyment struggled for the mastery, for children dearly love to have things happen, however mysterious the happening may be.

Again a noise was heard, this time as of dishes rattling in the pantry, and the grandfather strode across the room with his cane lifted as a weapon and flung open the pantry door. A queer sight met their eyes. "My bread! my bread!" gasped Kitty, dropping into a chair and laughing until the tears rolled down her face. Mr. Parsons' horse, which was supposed to be doing duty as lawn mower or cropper on their own premises, had strayed through the open gate, tramped across the garden, and, putting his head in at the window, had dragged the cloth from her bread and eaten the whole batch, except the last mouthful, with which he was still struggling while it dripped in sticky lumps of dough from his great jaws. His eyes rolled about in meek surprise at the group who intruded thus uninvited on his impromptu feast.

A few minutes later Mrs. Parsons was somewhat surprised to behold her usually lazy quadruped gallop wildly across the lawn and seek refuge in the barn, while Kitty was brandishing a garden hoe in the direction of his vanishing heels, and the Ellis children with various missiles were around her, and Grandfather Ellis, with his cane, seemed to be seconding her warlike intentions.

"What has the old horse been doing?" cried Mrs. Parsons, from the window. "He has eaten up all my bread," announced Kitty in an injured tone. "What shall we do!" exclaimed Mrs. Parsons in mock despair, "he is a dead horse; no horse living could survive a whole batch of your bread. He might as well have a cannon-ball in his stomach!"

"That is an unfounded libel on my bread," protested Kitty, "it was as light as a feather."

"Don't tell me, I have seen some of your bread, and I have heard Tom speak of it," retorted Mrs. Parsons, with a knowing shake of her head.

"Very well; but I give you warning that Tom and I shall eat supper with you to-night; we don't propose to starve for the sake of fattening up your old horse. By the way, if that bread keeps on rising you may expect to see your ancient quadruped

'Going up in little pieces

And coming down in spots!'"

and leaving behind her this direful prophecy from the "New King Arthur," Kitty and her body-guard defiled back through the garden, amid much laughter.

Tom and Kitty took supper at the minister's, as she threatened, but the old horse, instead of coming to a fractional end, continued to plod on his way with the sobriety becoming to a minister's horse.

But the tragic element in Kitty's affairs was yet to appear.

MRS. SUSIE A. BISBEE.

HOME DECORATIONS.

Vases for Cut-Flowers.

THE straight, thin milk glasses decorated with designs in oil-colors are as pretty and dainty for cut-flow-ers as anything one can find, and as they are sufficiently large not to crowd the stems, the flowers can be kept fresh much longer than in narrow-necked vases.

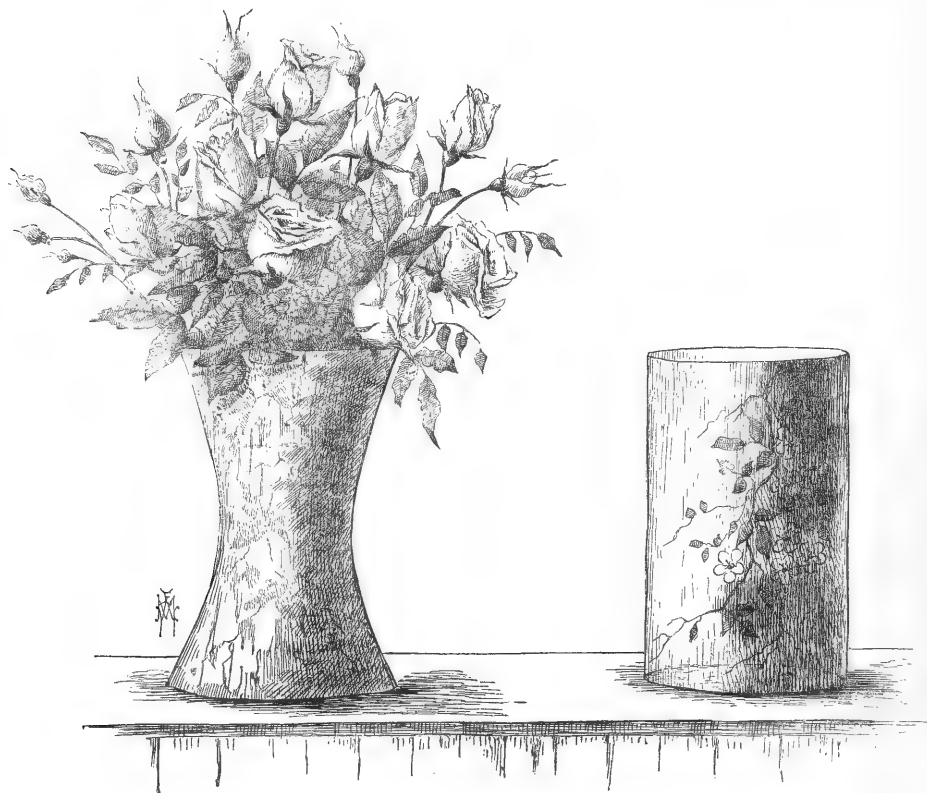
The shapes vary; some are straight, others somewhat hour-glass shaped, though not so tapering toward the middle. Sprays of flowers, gracefully arranged, are painted with oil-colors, and even though the glasses will, of course,

They are as pretty for ornaments as when filled with flowers, and are inexpensive, as they can be purchased in most glass and china stores for about ten cents apiece.

M. E. WHITTEMORE.

Sash Curtains.

PAINTING and embroidery combined form an exceedingly pretty decoration for sash curtains, tidies, bureau covers, &c. The work is very simply done; it is not necessary to be an artist to do the painting, for the



DECORATED VASES.

require washing, the painting will stand for a long time without becoming marred.

The vases which suggested this description were about six inches high and three inches in diameter, slightly tapering toward the middle. On one was painted a spray of hops, on the other apple blossoms. The effect of the flowers painted on the clear glass was exceedingly pretty, and the coloring was such that it would harmonize well with whatever variety of flowers the vase might be filled.

Other designs will of course suggest themselves, but always make the coloring delicate, and do not apply the paint too thickly, as the design will, in that case, seem coarse and rough. Two paintings will be necessary, as it is not possible to give high lights and deep shadows in the first coat. Therefore, let it dry thoroughly and touch with light, and shade where it is necessary.

colors are put on without any shading, and the embroidery is the plain outline or stemstitch with which almost everyone is familiar. Our illustration shows a morning-glory design for a sash curtain. Pongee is the material to be used, and the pattern is first stamped on as if it were to be embroidered. The block water-color paints are used, and are mixed with gum-arabic water, made by dissolving a small piece of the gum in water. Light blue and leaf green are all the colors necessary for the pattern here represented. After the painting is dry the flowers and leaves should be outlined in stemstitch with embroidery silk as near the shade of the flowers and leaves as possible; the veining and stems are worked in the same manner. The curtain is finished at the bottom with a deep hem hemstitched.

Brass curtain rings are sewed on the top and slipped



DESIGN FOR SASH CURTAIN.

on a brass rod, which is fastened to the window-casing by slipping the ends of the rod through two small brass rings screwed in the sides. The rings and rod can both be obtained at a hardware store, and will be found much cheaper than those which come especially for the purpose.

The room in which the curtain which furnished our design was seen was the bedroom of a young lady who had fitted it up artistically, doing all the work herself. It was not an expensive room at all, though one would suppose it to be upon entering. There were three windows with sash curtains described as above. The upper sash was papered with the stained glass paper, of so fine a quality and put on so neatly that the imitation was remarkable, and the cost was only about ninety cents for each window. Shades of light blue to match the morning-glories predominated. Another window, which was not needed, had a panel fitted in of wood, and was papered to match the room with an Indian-red paper of an indistinct pattern. A strip of fine white matting, fringed out a quarter of the way, was tacked up for a border with large brass-headed nails; this was decorated with effective painting, which was done after it was tacked up. Bunches of grasses, cat-tails, crescents, bamboo sticks and circles were scattered over it.

The toilet-set on the bureau was made of pongee and decorated to match the curtains. The rest of the furnishings were of either light blue or the dark red.

MRS. E. S. WELCH.

Splasher.

THE prettiest and most serviceable splashers are made of buff or gray linen, with an appropriate design embroidered on them with colored silk that will stand the test of washing.

A pond-lily design is an appropriate decoration, and

should be embroidered in outline or stem-stitch with different colored silks.

The splasher is fastened to a towel-rack the length of the washstand. The racks are generally shorter, but are now made long enough for this purpose.

Run a string through a narrow hem in the top of the splasher and sew a brass ring on each corner and in the middle to fasten it on small tacks on the back of the rack. In this way it can be easily detached when it needs washing.

E. S. W.

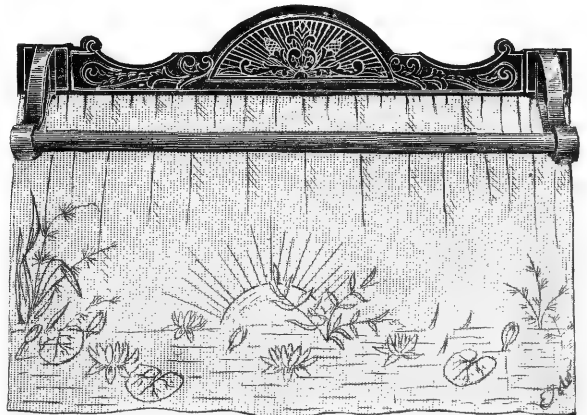
Decorative Notes.

JAPANESE reed material, similar to that from which splashers are made, admits of various decorative uses. An exceedingly pretty fire-screen was made of it, and painted in metallic colors; the upper part gilded and shaded into a fire-red at the bottom. A branch of dog-wood blossoms was then painted in natural tints, life-size, and formed a very beautiful decoration. This reed material is also made into paper-racks and letter-cases, as well as the various kinds of wall-protectors.

A low, square stand shown at one of the art stores is very tastefully decorated. The top is plainly covered with dark crimson plush, and a strip of the plush one-half yard deep, cut in four shallow points, is draped around the sides. To make the points appear deep and hang in graceful folds the plush is caught up in the hollows between the points and fastened in pleats to the edge of the stand-top. A full bow of crimson satin ribbon is fastened over the pleats. The bottom of the plush drapery is finished with full tassels made of grass-green ribbosene, cut in three-inch lengths, and the heads of the tassels are of shrimp pink ribbosene.

Poppy designs for sofa pillow and screen are worked with fine arrasene and embroidery silks on peacock-blue plush. The rich red of the poppy blossoms is very beautifully and naturally represented by Kensington stitches in red silk, which brings out the glowing colors perfectly.

Arrangements for holding small hooks to "hang on whatever you please" have nearly exhausted the ingenuity of decorative artists. All manner of fancy designs have been used for the purpose and now the



P.L.A.S.H.E.R.

kitchen is invaded and the wooden potato-masher brought into service, or rather taken from its field of usefulness, to stand as an ornament on the dressing-table. The "masher" is gilded or bronzed and groups of small field flowers and grasses are painted on the large end. Near the top of the handle four fancy brass hooks are screwed in and satin ribbon, an inch wide, is knotted around the top and tied in a bow at the bulge.

Pincushion covers are of fine linen lawn, with hem-stitched border, an inch wide, edged with Oriental lace. A sprig of flowers is embroidered in one corner with colored embroidery silks, and a full bow, of eight loops of narrow ribbon of the color of the embroidery, is used to fasten the cover to the cushion.

Dainty little jewel-cases can be made of two circular pieces of fancy colored satin five inches in diameter. A very pale-blue for the inside and a dark shade of the same color for the outside is pretty. Place a piece of scented cotton batting between the satin and sew a stiff bonnet wire in the edge. Finish the edge with a full

pleating of half-inch satin ribbon and bend the wire in toward the centre, so as to form four deep scallops on the edge to make it cup-shaped.

A very pretty and comfortable pair of bedroom slippers can be made of silk or satin, lined, wadded enough to make it sufficiently warm and stiff, and quilted in tiny diamonds. It should be cut in similar shape to men's slippers, with sides sloping down to the heel so no seam is needed; the heel-piece is made separately, and should not be quite two inches high. It is quilted and sloped down each side and lapped over the ends of the fronts when fastened to the leather sole. The soles can be obtained for a trifling sum already bound, so all that is necessary is to overhand the slipper-tops securely and neatly to them. The upper edge of the slipper is finished with a binding of narrow satin ribbon to correspond with the color used for the quilted part, and a full bow of wide satin ribbon of the same color is placed on the front of each. When neatly made of pale pink or blue satin they are very dainty. CYNTHIA.

NEW YORK FASHIONS.

I WILL only describe two or three dresses this month. Two of them are very simple and can be made by any lady who is skillful with her needle and sewing-machine.

Both are white embroidered wash goods. In both styles the waists are round, that is, having no basque. They are worn with belts of satin ribbon, closed with a large bow of many drooping loops, and this bow is placed just at the left of the centre, in front. The waists are composed entirely of the embroidered part of the goods, so arranged that the scalloped edge conceals the buttons and button-holes used for closing the front. The turned-over collar is made of the scalloped edge of the embroidered goods. The sleeves are also composed of the embroidery, fitting snugly above the elbow and widening toward the wrist, gathered to a narrow band, which in turn is finished with a slightly gathered ruffle, of the embroidered edge. This ruffle is caught up on the inside seam and held there by a bow of the satin ribbon.

The skirt of one of these dresses is composed of very wide embroidery, in fact it reaches within ten inches of the waist, and extends all around the skirt and is in reality merely a straight piece gathered, having neither loopings nor drapings; still it has a very rich effect on account of the richness of the embroidery.

The skirt of the other dress is a little more elaborate, the front breadth being edged at the bottom with narrow embroidery, headed by three tucks each an inch and a half wide. Laid over this breadth and nearly meeting at the centre of the waist-line, but separating at the foot of the skirt to show about fifteen inches of the front breadth at the bottom, are two panels of embroidery about half a yard wide, used with the scalloped edge toward the front. The back of this skirt is full but perfectly plain and composed of embroidery fully a yard deep. This skirt should be finished all around the foot with a ruffle of

narrow embroidery. In addition to the bow used at the closing of the belt, the dress is further enriched by a bow of the same ribbon in many long loops and notched ends placed just below the waist line on the right side of the skirt, about three inches from the centre of the back.

The third dress is an *écru étamine* made over a lining of the same color and trimmed with the same *étamine* woven in inch and a-half stripes with a dark shade of electric-blue velvet. This is used running around the underskirt in bayadere stripes, underneath which is a narrow pleating of the plain goods, showing not more than an inch. The drapery is very long, beginning on the left side far back with three pleats of the *étamine* held closely together at the top. This drapery is carried around the front to the right of the skirt, where it is draped very high with a graduated revers of the striped goods, which runs vertically here and is much wider at the waist-line than at the foot. The back of the drapery is also very long at the left side, and is draped upon the right with a revers similar to the front. The distinctive feature of this skirt is a narrow panel on the left side, where the front and back draperies come together. This panel is of velvet of the same dark-blue color and is buttoned over on the back drapery by little buttons set about an inch apart all the way up the skirt. The front drapery on the left side is buttoned over on the velvet panel in the same way, thus making two rows of small buttons, which, with the button-holes, make a very unique finish at the side. The sleeves are slashed diagonally at the wrists, and a small revers of the velvet is introduced, which is trimmed with buttons and button-holes to match the skirt. The waist is closed diagonally from right to left, and an edging of the same velvet follows the outline. The military collar is of velvet, and the short cuirass basque is embellished on the back at the right side with a bow of the striped velvet. MELUZINA.

HOUSEKEEPING.

What to do with a Shoulder of Veal.

IT is much more economical to buy veal in large quantities, and it can be put to so many different uses that a small family can easily dispose of ten pounds without becoming in the least tired of it. Veal is an excellent substitute for chicken, and can be used in a pie, croquets, clear white soup, scalloped eggs and scalloped macaroni, and any other use to which chicken is put—even making a delicious salad. The shoulder of veal can be bought in Eastern markets for twelve cents per pound. Have the butcher remove the shoulder-blade and cut off the knuckle; keep that and the meat that belongs with it for soup or jelly; it will make three pints of soup or a quart of jelly. If what remains is too much for a roast cut some stewing pieces from the ends, leaving the pocket where the shoulder-blade was to be filled with dressing. A double roasting-pan is much nicer for veal, as it keeps in the steam and juices, and the roast will not become dry. If there is considerable left from the roast with some gravy it will make a nice breakfast or luncheon dish and a salad. Save those portions which are moist and lean for the salad, and cut them in small dice. Use with twice the quantity of celery or white, crisp cabbage. Beware of imported cabbage, which looks fine, but has a very disagreeable flavor when it is used raw. Make a dressing with one-half pint of vinegar, one heaping tablespoonful of sugar, one teaspoonful of dry mustard, two eggs, a little salt and white pepper. Mix the mustard with a little of the vinegar, add to it the rest of the ingredients. Thoroughly beat the eggs and scald over hot water, stirring constantly to prevent curdling. Remove from the fire when it is like a smooth custard, add a piece of butter half the size of an egg, and pour it hot over a scant pint of meat. When it is entirely cold stir in the cabbage, chopped a little finer than the meat is cut. For the breakfast dish take the outside and the roughest parts of the roast, cut it fine, removing gristle and fat, and put it in a saucepan with a little water. Cover it closely and let it simmer for a half-hour; then add the gravy that was left, and if not thick enough, put in a little flour mixed with cold water. If no gravy was left, take some of the soup stock obtained from the knuckle, and use that in place of water when the meat is first put to warm. Then thicken as for ordinary gravy. Toast some slices of bread, being careful not to burn them. If stock is used instead of gravy some butter will be needed. Arrange the toast on a platter, pour the meat and gravy over it and garnish with parsley. There should be gravy enough to thoroughly moisten the toast. The soup stock will be nice for cream of rice soup or any soup requiring light stock, or for making gravies or sauces.

Pressed Veal.

This can be made by reserving that part of the shoulder which is not required for the roast and boiling it with the

knuckle till the meat will easily slip from the bones. Then take up the meat, chop it fine, season with salt, pepper and a little mustard and lemon juice, and boil the liquor with the bones till strong enough to make jelly, then strain and add to the meat. Thoroughly mix and turn into a mold until the next day. Garnish with parsley or celery.

Imperial Pudding.

Three eggs, one cup powdered sugar, one level cup (half pint) new process flour, or a rounded cup of the ordinary flour, two tablespoonfuls of water, half a level teaspoonful of soda and one and a quarter of cream of tartar. Beat the yolks with an egg-beater, stir into them the sugar and water. Make the soda very fine and sift it and the cream of tartar twice with the flour; then stir in the flour and beat thoroughly. Last, gently stir in the whites beaten to a stiff froth. Butter well a flat-bottomed pudding-dish and bake the cake thirty minutes. When done, let it cool; then cut it into the desired number of pieces, split and butter them and return to their places in the dish. Make a custard, using four eggs to a quart of milk, sweeten to taste, flavor and pour over the cake. Bake half an hour in a moderate oven.

Crême de la Crême Pudding.

Pare and slice sweet oranges, put a layer in a glass dish and sprinkle lightly with sugar; then add a layer of freshly-grated cocoanut, then another of oranges, and so on till the dish is half full; then pour over it Italian cream and set on the ice. For the cream, use one-quarter of a box of Cox's gelatine, three eggs, one quart of milk and three-quarters of a cup of sugar. Soak the gelatine one hour in a gill of cold water, then add to it a pint and a half of the milk and put it into a granite saucepan that will hold two quarts, and set the pan in a kettle of boiling water. Beat the yolks of the eggs with the sugar and a quarter of a teaspoonful of salt, add to them the remaining half-pint of milk, and stir into the hot milk. Cook five minutes, stirring constantly; then remove from the fire and stir in the whites beaten to a stiff froth, pour over the oranges and cocoanut and set away to cool. A plain, soft custard can be used instead of the cream.

Canned Huckleberry Pie.

This method of preparing the fruit for pies will be found suitable for any kind of canned fruit which is too juicy. Drain the juice from the fruit and put it in a granite-iron saucepan, reserving a quarter of a cup. Put it on to heat, and mix with the cold juice as much cornstarch or arrowroot as you think will thicken the entire juice to about the consistency of thick cream or jelly. When the juice in the pan is boiling hot, put in the cornstarch and stir constantly until it is scalded, then remove from the fire and add the fruit. If the fruit will bear any more sugar, add that while it is hot. Bake with two crusts and remove from the oven as soon as the crust is baked.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

The New York Horticultural Society held its first exhibition in its new quarters on East Fifteenth street, March 2, which proved to be one of the most disagreeable of March days and unfortunately prevented a large attendance. The display reflected credit on the exhibitors, and was worthy of the effort of the society. It was not an exhibition of quantity, but of sterling quality. The orchids from W. B. Dinsmore, some fifty spikes, composed of *Phalaenopsis Schilleriana*, *amabilis* and *grandiflora*, *Cattleyas trianae*, *amethystina* and *labiata*, phaius, odontogloss, coelogyne and lycastes, were a superb combination of coloring and form. Roses were in quantity well shown. The sport from Catharine Mermet, "The Bride," was lovely. Madame G. Luizet also was beautiful. Such varieties as Magna Charta, Paul Neyron, Anna de Diesbach, Camille de Rohan, Baroness Rothschild and the invincible Jacqueminot were finely shown. These represented the hybrid perpetual section. Fine Mermets, Niphetos, Perles des Jardin and Bon Silenes among teas, the hybrid teas being well to the front with fine William F. Bennetts, American Beauties, La France and Lady Mary Fitzwilliam. The above were to be seen in quantity, showing the standing of their popularity. A new rose, another sport from the hybrid perpetual Comtesse de Serenyi, a beautiful cupped form of that exquisite Malmaison blush which could well be called a Malmaison with cupped flowers, had many admirers. Another novelty, *Nymphaea Zanzibariensis* (a pale form), violet-shaded to dark purple, was exhibited by E. D. Sturtevant.

Spring flowers were well shown. A fine bank of hyacinths, tulips and narcissus, with lily-of-the-valley, added color and brightness to the display. A group of fifty lilacs in pots, some geraniums, &c., composed all the plants shown, excepting a collection of well-flowered orchids from John S. Bush. Some miscellaneous cut-flowers, as carnations, violets, geraniums, amaryllis, and dishes of fine mushrooms, cucumbers and tomatoes made up a very interesting display for this first effort of the year.

* * *

China Pinks.—It is truly astonishing to see how this useful class of plants is neglected, or not grown at all, which is better than to half grow a thing, when it possesses so many real points of usefulness. *Dianthus hedderwigi*, with its numerous beautiful varieties, is one of our most valuable summer flowers; although it is unjust to call it a summer flower, when, with but little attention, it can be made to ornament the garden from June until November, or until such times as the frosts destroy the chrysanthemum. For early flowers, sow the seed in July and transplant into a carefully prepared bed where they are wanted to bloom in August. After the ground has been slightly frozen, cover the bed to the depth of two inches with newly-fallen leaves, not sufficient to cover the plants, and no further care will be

required. The following June the bed will be a mass of bloom, which will continue until the plants from seed, sown in April, will come into flower. These in turn will last until early winter, and not unfrequently will the plants live through winter and afford much pleasure the coming summer.

* * *

Klunder's Flower Show.—As we go to press active preparations are being made by Mr. Klunder for the finest exhibition of flowers ever made at this season of the year. We do not mean ever made in this country, but in any country on any occasion. His display last year surpassed anything previously known, and that was but a feeble effort in comparison to what is now going on. That individual effort should so far surpass that of the best organized society seems wonderful; yet such is the fact, and it shows plainly what well-directed effort will do in any given direction. We hope to give a complete report of the exhibition in our next number.

* * *

Basket of Pansies.—"Among arrangements of flowers for the sitting-room table none have truer charms than may be gained from a handful of some simple flower placed loosely and easily in a receptacle of quiet form and color. * * * Pansies should be largely grown for cutting; they last longer in water than most summer flowers, and their varied markings, rich coloring and velvet-like texture make them worthy of the closest examination. They have an almost human interest, from the varying expression of their innocent face-like flowers, while not the least of their charms is a delicate and delightful scent. They should be cut long, with a liberal supply of stem and leaf, when they will readily fall into natural, easy bunches; cut with the flower-stalk alone they are less easy to manage and never look and last so well."

The above hint from the *Garden* suggests a good many others in the same direction. The saucer bouquet, as popularly known, is one of the simplest forms of table decoration, and certainly one of the most beautiful. Notwithstanding the fact that we have during the summer season flowers appropriate for all sorts of decoration, yet we are never content without a few saucers filled with pansies, balsams, forget-me-nots, and many other annuals that do not aspire to the dignity of a tall vase.

* * *

Verbenas.—When treated as annuals, but few plants surpass the verberna for quantity and quality of bloom. We consider the legitimate way to grow the verberna is from seed instead of from cuttings, though the latter is the more common practice. From seed we get plants much more vigorous, consequently better bloomers. 'Tis true, if a particular variety is wanted we must depend upon plants propagated by cuttings. But why is any given color required or rated more valuable than an-

other? We think only from the florist's efforts to increase sales by overrating a particular variety to which the committee of some society has awarded a certificate of merit. We think the great charm in growing flowers is to get something superior to what has heretofore been produced, and the only way to secure such results is by raising plants from seed. The verbena is quite as apt to astonish in that direction as any other class of plants.

We find in Peter Henderson & Co.'s catalogue a new race of verbenas noticed with flowers of enormous size and brilliancy. We would say, however, that we saw the same growing last season, and did not before suppose the verbena capable of so high a development in every point of usefulness and beauty, size, color, form and blooming qualities.

* * *

Gladiolus.—For early flowers plant gladioli as soon as the ground is fit to work, no matter how early, even though the ground may be frozen hard after planting it will not injure the bulbs in the least. Reserve the strongest bulbs for late flowers, and keep them in a dark, cool, dry room to prevent their starting. Although summer flowering bulbs, if they can be kept back until October the flowers will be much larger and finer. A cool, moist atmosphere is the one in which they delight. Climate alone is what makes the gladiolus succeed so well in England. As for soil, it makes but little difference what it is; if you can succeed in growing potatoes you can the gladiolus. If it is very heavy, plant shallow, say from one to two inches; if light, from four to six inches. It is best to use ground made very rich for some other crop the previous year, as fresh manure does not suit them.

* * *

Begonia alba perfecta grandiflora.—A couple of years since I obtained this very desirable begonia, without any label, and am not sure that this is the proper name, as neither florists nor amateurs who have seen it here have ever seen it before, but all unite in saying that it is the most beautiful plant that they have ever seen in this fine class. The foliage and growth resemble the well-known *B. rubra*, but are more dwarf, the flower is identical with the same plant, except that it is pure white. When the same plants were in bloom last spring, before being cut back, they were one solid mass of these elegant blooms, borne in immense pendent clusters.—*C. A. Reeser.*

* * *

Single Dahlias.—This popular flower gives the greatest satisfaction when treated as an annual, providing the seed has been saved from choice varieties. Seed sown in a frame or hotbed, or even in pots in the house, early in April, make splendid flowering plants in September, which is as early as the dahlia should come into flower under any circumstances, if the best results are an object. Our hot, dry summers are not such as the dahlia delights in, and the single forms seem more sensitive to the summer's sun than do the double ones. We should advise keeping over a few of the best colors and plants of the best habit from which to save seed. But where a

large mass is required, depend wholly upon seedlings, which should be planted close enough to spare a few of the poorer ones, of which there will always be a goodly number. These can be thrown out when the first flowers appear, and the others will soon spread themselves sufficiently to cover the ground. The certainty of securing some really good flowers and the reasonable hope of getting a few superior ones, adds a great charm to the cultivation of this, like that of all other flowers of a similar nature.

* * *

Postage on Seeds.—The American Seed Trade Association and the Society of American Florists, justly alarmed at the action of Congress in considering a bill to increase the postage on seeds and plants, have gone to work with a determination not only to defeat the bill, but also to pass a bill to reduce the postage on seeds and plants, and there is now a fair prospect of their being successful in both. The following representatives from the two associations have waited on the Congressional Committee on Post-offices and Post Roads, and submitted to them some unanswerable arguments in favor of the reduction of postage:

Peter Henderson, New York.	John Thorpe, Queens, N. Y.
Wm. A. Dreer, Philadelphia.	A. Conard, West Grove, Pa.
W. Atlee Burpee, Philadelphia.	Robert J. Halliday, Baltimore, Md.

The following facts were neatly stated: "We claim that seeds, plants, forest trees, &c., are educators of the people, and that the development of our agriculture and horticulture being directly dependent thereon will proportionately increase the receipts from postage on letters and catalogues, while at the same time it will operate to the benefit of nearly every farmer, market gardener and rural resident, who being able to obtain seeds, bulbs and plants so much cheaper will plant more largely, and will test new improved varieties. The very fact alone of seedling forest trees, and tree seeds being thus carried at cheaper rates will immeasurably serve a need now widely felt and largely agitated, for these seedling forest trees could not be safely sent unless by such quick conveyance as the mails."

* * *

Mushrooms have become a favorite article of food, and we may say quite a common one, as they are to be found nearly all times of the year at the principal vegetable markets in our leading cities. They are also canned for use when they cannot be obtained in the markets, and are also pickled in large quantities. To grow mushrooms, in order to have them fresh during winter, is quite an expensive undertaking, and a practice that cannot become general because of the cost. Every family that has a lawn can have an abundance of this delicious vegetable in autumn with very little trouble or expense. All that is necessary is to obtain some spawn, which is very cheap, break it into small pieces and plant it on the lawn. Dig small holes two inches deep, put in a piece of spawn an inch square, and cover up with the soil taken out. This will not in the least disfigure the lawn, which will, without further care, yield an abundant supply of mushrooms

during September and October, and, in a favorable season, a large lawn will yield sufficient for winter use. The spawn should be put in as soon as any gardening can be done, say in April or early in May.

* * *

Hyacinths after Flowering.—If properly treated after they go out of flower, hyacinths will bloom fairly well the second year, but of course not equal to the first. The proper way to treat them is, as soon as the flowers fade, to cut off the old stems, preserve the leaves from injury, and then plant them out in a bed of soil in a cold pit or frame. When turning them out of the pots only take away the crocks that have served for drainage, and leave the ball of soil intact. As soon as they are planted give the soil sufficient water to settle it firmly about the roots; then shut up the frame close for a week, and throw a mat on the glass for a few hours during the day if the sun is very strong. At the end of a week give a little air, and increase the amount gradually, removing the lights to allow them to have any gentle warm showers that may come during the day. In six weeks from the time of planting, the lights may be removed altogether, but the roots must not suffer for the want of water all the time there is a green leaf upon them. When all the leaves are quite yellow, take up the bulbs and place them singly on a shelf in a cool, airy shed. Bulbs so treated come in admirably for the mixed borders another year.—*Gardener's Magazine*.

* * *

A Double Verbena.—George Wittbold, a Chicago florist, is authority for stating that at last a double verbena has been produced. It is of the old Defiance or scarlet strain. Whether it is likely to be of any interest in the double form remains to be seen. A peculiarity about this doubling of flowers is that a certain amount of cultivation seems necessary before the change is brought about. With some flowers a few years seem to produce it, while with others a much longer time is required. The verbena is one of the latter kind, and has come along with the doubling of the *Phlox Drummondii*. Some flowers are improved by this doubling of the petals, while others remain at best only a curiosity. The pansy a few years ago was heralded with double flowers, but it has been lost sight of, and possibly is even lost to cultivation. Some day, however, other strains may break and something good be obtained. First the double zonal geraniums were poor affairs; now who would be without them?—*Prairie Farmer*.

Catalogues, &c., Received.

"A Few Flowers Worthy of General Culture." B. A. Elliott Company, Pittsburgh, Pa.—This is, in reality, a catalogue of hardy herbaceous plants and choice seeds, but is in all respects so much superior to anything in the catalogue line that it deserves special notice. It is a just plea in favor of hardy plants, which are illustrated and described in the most pleasing and truthful manner.

As a guide to the amateur, we know of no publication that excels it, while the illustrations and presswork compare favorably with the best of our monthly magazines.

W. S. Little, Rochester, N. Y.—Semi-annual wholesale price-list of the Commercial Nurseries. Ornamental trees and clematis a specialty.

D. M. Ferry & Co., Detroit, Mich.—Annual illustrated catalogue of vegetable and flower seeds, bulbs, plants, &c. Good as usual.

Iowa Seed Company, Des Moines, Ia.—Sixteenth annual catalogue of vegetable and flower seeds.

Wm. C. Beckert, Allegheny, Pa.—Annual illustrated catalogue for 1886. Beckert's new and valuable radish, the "Chartier," a specialty.

W. W. Rawson & Co., 34 South Market street, Boston, Mass.—Illustrated handbook of vegetable and flower seeds. The name of "Rawson" is familiar to all who are acquainted with first-class vegetables.

Ellis Brothers, Keene, N. H.—Descriptive and illustrated catalogue of vegetable and flower seeds for 1886. Cheap lists a specialty.

Charles T. Starr, Avondale, Pa.—Annual descriptive catalogue of the Pleasantville Nurseries, flowering plants, bulbs and cuttings.

All Garden Supplies, Robert J. Halliday, Baltimore, Md.—For the trade only, to whom are offered a rare collection of roses, camellias and azaleas. Also retail descriptive catalogue of all that is desirable in the way of seeds, bulbs and plants.

Michel Plant and Seed Company, 708 Olive street, St. Louis, Mo.—Illustrated descriptive catalogue of garden and flower seeds, summer flowering bulbs, bedding and greenhouse plants.

H. Beyers, New London, Ia.—Annual catalogue of "warranted" garden and flower seeds. Sent free to all applicants.

Paul Butz & Son, New Castle, Pa.—Wholesale and retail catalogues of plants and trees.

The Mapes Formula and Peruvian Guano Company, 158 Front street, New York city.—Catalogue and price-list of Mapes's complete manures.

John S. Collins, Moorestown, N. J.—Illustrated and descriptive catalogue of small fruit plants.

Schlegel & Fottler, 26 South Market street, Boston, Mass.—Annual seed, plant, bulb and fertilizer catalogue for 1886. A very correct and complete manual.

Hale Brothers, South Glastonbury, Conn.—Annual catalogue of small fruit-plants, with the motto, "Big Berries and Lots of Them."

W. C. Wilson, Astoria, N. Y., and 45 West Fourteenth street, New York city.—Annual retail catalogue of roses, orchids and all manner of greenhouse, bedding, vegetable and small fruit plants, bulbs, seeds, &c., &c.

Robert Scott & Son, rose growers, Philadelphia, Pa.—Annual catalogue of roses, chrysanthemums and bedding plants. Roses a specialty.

Delos Staples, Willow Ridge Fruit Farm, West Sebawa, Mich. Descriptive price-list of blueberries.

"The Florida Cultivator," published by the Southern Sun Publishing Company, Palatka, Fla.—This new as-

pirant for public favor is devoted to the farm, grove, garden and fireside. If the future numbers are as good as No. 1, Vol. I., it will deserve all the favors it may ask, for we consider this number a valuable publication. It is not only instructive, but so entertaining as to make it both pleasant and profitable reading. It is far more scientific than the average horticultural publication, yet is so free from technical terms that the reader will soon become interested in the science of horticulture.

Irving Allen, Springfield, Mass.—Annual illustrated catalogue of small fruit plants and fruit-trees.

L. W. Goodell, Dwight, Mass.—Annual illustrated catalogue of vegetable and flower seeds.

Bristol Sisters, Topeka, Kan.—Annual catalogue of useful plants and flower-seeds. Send for this catalogue and see what ladies can do for and in floriculture.

Aaron Low, seed grower, Essex, Mass.—Seed catalogue and garden manual. An excellent publication.

Martin Benson, Swanwick, Ill.—Guide to fig culture in the open ground at the North, and catalogue of rare tropical fruits and plants.

Fred W. Kelsey, 208 Broadway, New York.—Abridged catalogue of new and choice trees, shrubs and plants.

Wm. H. Moon, Morrisville, Pa.—Illustrated catalogue of the Glenwood Nurseries, fruit and ornamental trees shrubs and plants.

H. S. Anderson, Union Springs, N. Y.—Descriptive

catalogue and price-list of the Cayuga Lake Nurseries. The new plum, "Shipper's Pride," a specialty.

J. A. Everitt & Co., Watsontown, Pa.—Catalogue of vegetable and flower-seeds. Potatoes a specialty.

A. Blanc & Co., Philadelphia, Pa.—Catalogue and hints on cacti. By mail, postpaid, on receipt of fifteen cents. This is an exceedingly interesting and useful treatise on the cultivation of cacti, a family of plants but little understood.

Thomas Jackson, Portland, Me.—Annual wholesale catalogue of fruit and ornamental trees, shrubs, small fruit plants, &c.

George W. Hawkins, Newburgh, N. Y. Illustrated catalogue of trees, vines, shrubs, plants, &c.

Albert Williams, Sharon, Pa. Book of flowers and plants, illustrated. The annual announcement of a devoted florist to the devotees of floriculture.

B. P. Critchell & Co., Cincinnati, Ohio. Their thirty-third catalogue of plants and flowers, freely illustrated.

Stark & Co., Louisiana, Mo. Wholesale catalogue of the Stark Nurseries for the spring of 1886. The "Mariana" plum a specialty.

Mansfield Milton & Co., Youngstown, Ohio. Illustrated catalogue of vegetable and flower seeds, bedding plants and cut-flowers.

Haskell's Floral Nursery, Dubuque, Ia.—Illustrated plant catalogue for 1886.

ANSWERS TO CORRESPONDENTS.

Editor Floral Cabinet:

I have tried growing narcissus, hyacinths, crocuses, snowdrops and scillas as pot-plants this winter, and have been amply repaid by the abundant sweetness given me in return for so little trouble. But now I am at a loss to know what to do with them as their bloom decays, and ask you to give me advice on the following points:

1. Will a polyanthus narcissus which has bloomed this year bloom again in the house, and how shall I keep it through the summer? 2. How shall I treat the Roman hyacinth for bloom next winter? 3. Mine has formed five additional bulbs; will they bloom next winter? 4. How must I treat the scillas, snowdrops, crocuses and hyacinths I want to keep for winter blooming next year? In earth during the summer, or dry? 5. I attempted to grow a freesia, but failed. I want to try again, encouraged by an article in the last CABINET. How shall I treat it to make it bloom? Very truly,

MRS. B. H. M.

Answer.—There is but one reply to all your queries excepting the last. The bulbs you have grown this winter so successfully cannot be induced to bloom for you next winter. By encouraging leaf-culture now, and gradually ripening off, you can plant the bulbs in the border next fall and get some small spikes of bloom the following spring. It is the cheapest and best plan to throw them away as soon as they are done blooming. The

Roman hyacinth will, in a measure, recuperate, if planted in a good rich soil with a sunny exposure.

5. There is no bulb more easy to manage than the freesia. Put six or eight bulbs in a six-inch pot filled with ordinary potting soil, water thoroughly, and set aside until they commence growth, then give them a light, warm situation and they will come into bloom soon after Christmas. Let the bulbs you have thoroughly ripen, and leave them in the pot perfectly dry until about the first of September, then repot and they will commence growth.

Hardy Climber—*Mrs. F. Hayes.*—The wistaria is an admirable climber for the situation you name, as is the aristolochia, or Dutchman's pipe; neither are very expensive plants. (See florists' catalogues.) They will not make much growth the first season, and to fill the space we should advise planting the maurandya, a most beautiful climber.

Bulbs.—*Mrs. Stanley Bown.*—Plant in the open border as soon as the weather will permit.

Amaryllis rosea.—(Premium No. 3).—*C. Urbane.*—Plant in the open ground the same as gladiolus, or other summer-flowering bulbs. Cover the bulb, if the soil is heavy, but half-an-inch; if light and sandy, cover one inch, and no further care will be necessary to secure an abundance of flowers. A moist soil and sunny exposure are essential to perfect development.

NEWSPAPER WAIFS.

—Five million needles recently sunk with an ocean steamer to the bottom of the sea. We hope the mermaids will take the hint and make themselves some clothes.—*Burlington Free Press.*

—“As for me, I hope to be cremated.” I made that remark to my pastor once, who said, with what he seemed to think was an impressive manner: “I wouldn't worry about that if I had your chances.”—*Mark Twain.*

—Tramp—Will you please give me ten cents, sir? I'm on my way home to die.” Gentleman (handing him the money)—“I don't mind giving you ten cents for so worthy a purpose as that, but your breath smells terribly of whisky.” Tramp—“I know it does, sir. Whisky's what's killin' me.”—*Drake's Traveler's Magazine.*

—Well, I was fooled last night,” remarked Mrs. Snaggs. “How so, my dear?” asked her husband. “I found a piece in the paper headed ‘The United Brethren,’ and when I read it, it was about a religious denomination.” “Certainly it was. What did you think it would be about?” “Why, I thought it was something about the Siamese twins.”

WHAT DO YOU KNOW?

A foreign visitor to the United States, on his return home, was telling the peculiarities of the people of different American cities. In one of them, he said, they had for a shibboleth, “What do you know?” Without regard to any other of the circumstances in which an applicant for admission to their society might be placed, he had to show intelligent experience in a wide range of knowledge or he was excluded. We have often thought that was a very excellent test of character, and it is a test that more people than those living in the particular city referred to make continually, whether consciously or not. It is the ordeal every witness in every court of justice everywhere has to undergo. It is right that the test should be applied, and it is right that every applicant for attention in human society should endure the ordeal. The test is of value under varied conditions. In the sick-room the question is asked of those who once were ill, but who are now enjoying health, about means of restoration, “What do you know?” The kindly hearts of a number of correspondents who, through gratitude, have come forward to tell the story of the means by which they are now well, lead to the publication of the following responses:

REV. CYRUS HAMLIN, D.D., LL.D., President of Middlebury College, Vermont, writes:

“I derived so much benefit from your Compound Oxygen Treatment last year that I will ask you to send me the same supply for home treatment with the Inhaler, for which I inclose the price. By my advice others have tried it, and never without benefit.”

REV. A. A. JOHNSON, A.M., formerly financial agent, and now President of Wesleyan College, Fort Worth, Texas, wrote us under date of February 21, 1885:

DRS. STARKEY AND PALEN—From 1878 to June, 1883, I was troubled more or less with catarrh. During those years I tried several remedies, but from them I received no permanent relief. In the winter and spring of 1883 I grew a great deal worse, and suffered greatly with sore throat, hoarseness, and catarrhal fever. At times I could not speak publicly, because of hoarseness and coughing. Alarmed at my condition I sought a remedy, and was led to try the Compound Oxygen cure. It worked like magic. Within two weeks my hoarseness and sore throat were gone, and my general health began to improve at once. At the end of three months, when I had finished the first treatment, the catarrh was gone. I have not been specially troubled with catarrh since. I regard the Compound Oxygen treatment as a wonderful discovery of science, and a blessing to suffering humanity.

A. A. JOHNSON.

On November 2, 1885, Mr. Johnson wrote: “You are at liberty to use anything I have written you in

favor of Compound Oxygen. I regard it as a great remedy.”

REV. JOSEPH H. FESPERMAN, of Capel Grove, N. C., was a great sufferer from lung disease until he took a course of treatment of Compound Oxygen. He writes: “I believe the cavity in my left lung is healed. Until two weeks ago have not coughed a dozen times in a year.”

Curiosity as to Compound Oxygen may be fully gratified by anyone who will take the trouble to write a postal-card or letter of request to Drs. Starkey & Palen, at 1539 Arch street, Philadelphia. They publish a brochure of nearly two hundred pages, entitled *Compound Oxygen—Its Mode of Action and Results*; also monographs on asthma, catarrh, consumption, dyspepsia, hay fever, neuralgia, rheumatism, &c.; also, once a quarter, they issue *Health and Life*, a record of cures of patients made by the patients themselves. This publication has been issued every quarter for over six years, and is a complete answer to all questions as to the virtues of Compound Oxygen. All this literature, or any part of it, will be sent, post-paid, freely, to any address on application.

—Well, what have you got for supper?” asked Mr. Snaggs last night as he entered the dining-room. “Why, I have some biscuits that I made myself, dear,” replied his wife. “Well, bring them on,” said Snaggs in a resigned tone. I'm hungry enough to eat anything.”—*Pittsburgh Chronicle.*

—A BUILDING FOR WORKING WOMEN.—Warner Brothers, the well-known corset manufacturers, have commenced the erection of a building in Bridgeport, Conn., to cost \$35,000, for the free use of the 1,000 girls employed in their factory. The building will be about seventy feet square and three stories high. The first story will be devoted to a restaurant, where good meals will be furnished at cost. The second story will contain a large reading-room and library, conversation room, music room, bath-room and lavatory. The third story will contain a large hall, seating 600, a small hall, seating 150, and class rooms, where evening classes in singing, penmanship, drawing, bookkeeping, fancy needlework, &c., will be taught. The building will be under the care of a competent matron, and will be free to all girls in Warner Brothers' employ. It will be the first building of this kind erected in this country, and will without doubt prove the practical wisdom and benevolence of its projectors.

—Our readers will notice in this issue of THE FLORAL CABINET, a change from the small advertisement of Le Page's Liquid Glue, showing the small can or bottle. Instead of the simple announcement of its merits, those who use it, amount of sales, how sample can be obtained, &c., the Russia Cement Company perform a praiseworthy act in revealing, fraud which is the more contemptible, because it affects only the smallest size for family use (the bottle goods), and therefore affects those who are obliged to buy in small quantities rather than those who are able to stand the imposition. In addition to the statements of the advertisement, which we have from good authority are exact in details, we have it from sources unquestioned that various statements promulgated through the press, by show cards, &c., of other glues as receiving endorsement from high government officials, are entire fabrications with not even the color of truth. In point of fact, the Smithsonian Institution (as well as other government departments) have used, and still use Le Page's Liquid Glue exclusively, reason for which is found in its containing no acid, while we are informed others have an acid base; and its superior strength. At New Orleans, on a Riehle testing machine, a block of Georgia pine one inch square, butted, registered 1612 pounds before parting. Le Page's Liquid Glue does not need our especial praise; the fact that such manufacturers as the Pullman Palace Car Company have adopted it shows its worth to every wood-worker, and for every family in the land.

—Every bonnet has a “b” in it.—*Lowell Citizen.*

—A bad man is like bad muckilage. He will stick at nothing.—*N. O. Picayune.*

—Norwich, N. Y., is to have a comic opera to raise money for a cemetery fund. As Pope says, “From grave to gay.”

—That was a quaint conceit of the boy when he unlocked the horns of the two fighting goats and separated them said he had “unbuttin'ed” them.

—Miss Frances E. Willard has selected some Gospel and Temperance songs, familiar tunes, 200 copies of which will be sent to any church or Sunday-school. Address the Publisher, Mrs. Laura G. Fixen, Albert Lea, Minn., enclosing twenty cents for postage.

—After two years' trial, we unhesitatingly pronounce the Boss Zinc and Leather Collar Pad the only durable and successful one that we have ever used. It retains its shape, is cooling, prevents chafing, and thereby keeps the horses' necks clean and healthy.—HIRAM G. DODGE & SONS, wood and coal dealers, Madison, Wis.

PARKER'S EMBROIDERY STAMPING OUTFIT!!

100

CHOICE PATTERNS



\$1.00

PREPAID BY MAIL.

This outfit **does not** consist of a lot of worthless little patterns so crowded together on a single sheet that they cannot be used, and **is not** accompanied by a lot of trashy articles put up in a cheap paper toy shopping bag.

THE VALUE OF THIS OUTFIT IS IN GOOD USEFUL STAMPING PATTERNS.

AND THE MONEY WILL BE CHEERFULLY RETURNED IF NOT SATISFACTORY.

Description of a few of the patterns:—1 set of initials for towels, hat ribbons, &c., worth 50c.; 2 large outlines for ties, 25c. each; 1 design for tinsel embroidery, 5 inches wide, for end of table scarf, 25c.; 1 tidy design for ribbon work, 20c.; 1 large clover design, 7x11, 25c.; and 1 large thistle, 6x7, for Kensington painting, 25c.; 1 stock and 1 large butterfly, for lustre painting, 25c.; 1 pansy design for ladies bag, 10c.; 1 design for thermometer case, 20c.; 1 elegant spray of golden-rod, 6x11, 25c.; 1 Martha Washington geranium for plush petals, 6x10, 25c.; 1 half wreath for hat crown, 15c.; 1 design for top of umbrella case, 15c.; 1 spider's web, and 1 new disk pattern, 25c.; 1 tidy design, owl's on a tree, 25c.; 1 vine of daisies and ferns, for end of table scarf, 15c.; 1 wide braiding pattern, 25c.; 1 large bunch of daisies, 20c.; and 75 or more other designs of roses, clematis, autumn leaves, outline designs, &c., &c. Besides the patterns the outfit contains: 1 box black and 1 box white powder; 2 distributors; illustrated instruction book, teaching stamping, all the stitches, &c.; 1 tidy, all stamped and ready to be worked, with silk to work it, and our **Catalogue and Illustrated Price List**, with over 3000 pictures, and description of patterns, new fancy work, table covers, key holders, &c., and prices of silks, felts, satins, chemises, tinsel, &c.

We are the largest dealers in these goods in the world. Best Kensington Floss 25c. per doz. skeins. Embroidery Silk 25 skeins 13cets. by mail. Price List Free. Catalogue of Patterns, 25cets.

T. E. PARKER, Lynn, Mass..

The readers of this journal are reminded that the above advertisement is not a catch-penny offer, but the honest statement of a firm dealing exclusively in this class of goods.

LADIES'
FLORAL CABINET.

Volume XV.

MAY, 1886.

No. 5.



CACTUS DAHLIA, MRS. HAWKINS (Flowers sulphur yellow, shading to creamy yellow).

THE CACTUS DAHLIA.

THE dahlia is a fortunate flower, always presenting some new phase to make, or rather keep it, popular. The single form, when first introduced, created a craze in the floral world which was soon magnified by the double form that has been so generally cultivated for the past fifty years. When the popular taste began to tire of this type and to want something new, the single form of a new type fortunately appeared and received marked attention, which it richly deserved. And now an intermediate form is creating a sensation, as well it might. The cactus dahlia is truly an acquisition, being of pleasing form and of the most dazzling color and, withal, a remarkably free bloomer. The hybridist has already given us several varieties of it, among which is *Mrs. Hawkins*, the subject of our illustration. This was exhibited last year for the first time, at a meeting of the Royal Horticultural

Society, London, by S. S. Ware, Esq., and it is described as follows in the *Gardener's Magazine*:

"The figure accompanying this note is a faithful representation of it as regards form and proportions, but gives no idea of its delicate shades of soft yellow, passing into cream or primrose tints, that render it so conspicuous as distinct from other flowers of its class. Several new varieties of this section have been brought forward, but they mostly fall below the fine form of *Juarez*, which is the best model and the leader of the group. This variety, however, keeps much of the original character, with the advantage of a distinct and most delicate and delightful color. The plant is of good habit, rising about four feet, and produces a larger crop of flowers than other varieties of the cactus section; in fact, it flowers profusely and is particularly attractive in the garden."

START RIGHT!

IN all business operations success depends almost wholly on getting a good start, a start where the conditions are favorable for the business proposed. This principle holds good in gardening operations; in fact, it is more important to begin well there than anywhere else, for an error at the start cannot be remedied later in the season. The garden is a very arbitrary institution, at the same time a generous one. It insists upon just rules and regulations; if these are complied with abundant returns will be yielded of whatever is expected from it; if neglected the product will be just as great, only it will be for the benefit of birds and worms, essentials in the economy of nature, and nature always looks out for her own. So, if we neglect our gardens *they* will not suffer, but be just as happy with a crop of weeds and worms as with a crop of woodbine or wall-flowers. We are the ones to pay the penalty, and pay it we must, if it be deserved.

May is the important month for the commencement of gardening operations, although every month and every day is the new year to some plant. But the flower-garden as generally understood is to be commenced now, and what it will be for the season will depend upon present arrangements; if these are complete a garden of pleasant flowers will be the result. If our work is but poorly done the results will be proportionate.

The preparation of the soil is the first thing in order; it matters not what you may wish to cultivate, fruit, vegetables or flowers, the soil must be put in a proper condition or failure is inevitable. No form of vegetable life can live, much less thrive luxuriantly, unless it has something to live upon. Plants dwell beneath as well as above the surface; they must grow down as well as up, and these growths are relative. Therefore do not expect your plants tall, strong and withal furnished with bloom

unless they have a deep, rich soil to dwell in. If you dig shallow, your plants will be thin, just what you make them. The deeper you dig and the greater your storehouse of food, the stronger and richer will be your fruits and your flowers. Cause and effect are as plainly shown in the garden as in any other business transaction.

If we are disposed to make the most of the spot which is to be a garden, a little good common sense—a rare article—in selection is quite as essential as is the preparation of the soil. Where gardening is to be done on an inexpensive scale, we recommend annuals to be largely used, and those of the more delicate kinds, as they give a greater abundance of such blossoms as are most desirable for bouquets and vases; besides, they harmonize better with what are termed bedding-out plants, bulbs of various kinds and hardy herbaceous plants. We should advise the growing of bulbs on the most extended scale, and choice herbaceous plants as far as space would permit. But where, for various reasons, these cannot be planted in quantity let the space be filled with annuals.

The ease with which annuals are cultivated adds to their attractiveness, and is in itself a strong argument in favor of their general cultivation. This fact has not been lost sight of by those who make a specialty of seed-growing. Greater care than ever before is now extended to this culture, and by selection, cross-fertilization and botanical research new and rare varieties are being constantly brought forward. Our seedsmen's lists furnish abundant opportunity to make a selection suited to every taste, as well as to every soil and situation. It must be borne in mind that in any given locality all kinds of annuals or bulbs will not succeed. But there is no soil nor situation in which grass can be grown that a sufficient number of varieties of annuals cannot be grown to satisfy any reasonable desire. If one thing will not do,

try another, for it is certain that something will grow ; consequently, success or failure depends wholly upon the selection you make. Many soils that are heavy, strong and tenacious are congenial to certain plants, which inherit correspondingly vigorous constitutions ; their appetites are keen, digestion perfect, and, consequently, are rapid growers. Introduce such plants into a light, friable soil and they will soon die from exhaustion, because they have not in their adopted home the elements essential to their existence. On the other hand, a plant that is indigenous in a light, friable or sandy soil cannot digest the food it finds in the house of clay ; neither can it rest on a bed of marl. It is very safe to assume that bad luck or ill-success is the result of unwise selection.

Much of the beauty of the garden depends upon the arrangement of the beds, in order to produce pleasing effects in grouping and in harmony of colors. After making all necessary arrangements in regard to beds and borders, and having selected such seeds as good taste and good judgment dictate, it will be well to observe the following rules during the season : Sow the seeds thinly ; cover but slightly ; press the soil firmly over them, yes, tread them in, as Henderson suggests ; water the plants in times of drought, if it can be done thoroughly, otherwise not ; better by far keep the soil stirred every day during a drought than to water sparingly ; watering half done is like all other things half done, worse than if no attempt had been made ; do not allow plants to stand too closely together ; thin out until each and every plant has sufficient room for its perfect development ; cut down all plants as soon as they are out of bloom ; remove dead leaves and all sickly plants ; tie up to sticks the drooping heads and branches of semi-scandent plants ; let all things be kept neatly and in order.

As we have before stated, an important feature in gardening is in a proper classification or grouping, as regards habits and luxuriance of growth. Many annuals must be grown in comparatively poor soil, or they will obtain too great luxuriance, which is ever at the expense of flowers, while others require a very deep soil to bring them to perfection. These considerations are essential

to harmony, without which there is no real beauty in the garden, other than that which is to be found in all flowers. The disposition of plants with the view of producing a good effect when in blossom is a matter of individual taste, and there is ample opportunity for variety. Tastes differ so widely, and the size and shape of the garden, together with the different dispositions of the buildings, that it is impossible to lay down a rule that can be successfully followed. It is difficult, indeed, to produce other than a good effect with such beautiful material ; but the general rule must be followed of keeping the tallest plants in the background.

Outbuildings should be covered with vines of some kind, and, if economy is an object, nature has anticipated the situation and furnished the morning-glories, the loveliest of flowers ; these are particularly desirable for shaded situations, and in such they will remain a long time in bloom. Unsightly fences can be covered with them, and if anything is more beautiful than a long row of morning-glories at sunrise we have yet to see it. Nasturtiums make a splendid background for a border, and for a covering to a line-fence nothing can exceed them in beauty. In a neighbor's yard we saw a row of nasturtiums nearly one hundred feet in length, in front of this was a row of petunias, blotched and striped, outside of the petunias was a row of sweet alyssum ; the effect was very pleasing and the whole cost for seeds was less than half a dollar. A row of cannas next to an unsightly fence, with a row of dahlias in front and an outer row of *Salvia splendens*, makes a cheerful border at a moderate cost.

In regard to selection we do not wish to dictate, but would like to encourage the planting of some flower that will make home more beautiful. It matters but little what it is, a start is all that is required to develop a taste that will increase so rapidly that the owner of a garden will not need urging on. There is one necessity, however, that must not be lost sight of, that is, to start right. If you have but a single plant grow it well ; it matters not what it may be, if its full capabilities are brought out it will be an object of beauty. And if, on the other hand, a rare plant is neglected, no matter how much it may have cost, it will be an object of pity.

TRELLISES FOR CLIMBERS.

ONE of the most desirable reforms needed at present is a graceful trellis for climbers. No one with any taste can be satisfied with the ordinary wooden supports, only partially covered with foliage, that are everywhere used for training running plants.

Nature gives us various hints, the most common and pleasing of which is the grape-vine covering a tree with a round or spreading top. In time the support is entirely hidden by the glorious mantle of beauty which, in its struggle for light and air, usurps every available square inch of exposed surface, and forms a mass of billowy green often strikingly unique.

No one but a crank would think of improving such an

example of nature's work by thrusting bare poles up through the canopy, or adding here and there protruding bits of painted carpentry ; yet this is just the effect of the tasteless, flat and uncouth structures everywhere seen supporting climbing roses and clematis.

If climbers are grown for the purpose of exhibiting a complex and ornate specimen of wood-work, then the present arrangements are suitable and in good taste.

If they are grown for their own intrinsic beauty, then the trellis is a secondary consideration, furnishing only a hidden support according to nature's best examples.

On the supposition that this last is the true object of planting climbers, we are led to investigate their nature,

and find a wide difference in the plants requiring support.

The climbing roses, with their unyielding woody stems, make no pretension to graceful adaptation to minute inequalities of surface. All they ask is simple support and room for lateral extension.

Making a growth of from eight to twenty feet in a season, which a single severe winter often cuts back to the ground, they require a support that gives them room to extend in a general upward direction and one that is strong and inconspicuous. A trellis twenty feet high is obviously impracticable, and a flat trellis of less height and greater width is equally so, for the growth reaches the top sooner or later and all that is above sways and whips in the wind.

As in many other perplexing matters, the right way is very simple. Six iron rods, nine feet high, planted in the form of a pillar and slightly connected at the middle and top is all that is necessary. Around this skeleton column the strong shoots of the roses can be trained in spiral form, and when rightly managed nothing will show but the foliage and bloom, the lateral growth taking away all appearance of stiffness. For the lower end the rods should be riveted to two strong bands eighteen inches apart, and these planted in the ground so that seven feet of the column shall remain above the ground. Twelve to fifteen inches is about right for diameter.

For such yielding self-adapting vines as the Dutch honeysuckle and its congeners, a simple wire globe upon a low post, or better still, a balloon-shaped frame with the neck in the ground, is much more presentable than the ordinary harp-shaped wooden contrivances.

For pot-climbers, like ivy geraniums, *cissus discolor*, &c., the balloon-shaped wire trellis is the most desirable.

I think the handsomest ornamental plant I have ever

seen was a finely grown *cissus discolor* upon a balloon frame about thirty inches high. It had been trained to cover the frame and was a marvel of rich coloring.

It seems to me, that if any wire design-maker would make two or three sizes of balloon-shaped supports for climbing pot-plants, he would find them speedily becoming popular.

Anyone can easily make such a frame by simply bending three or four wires into the right form and sticking them into the ground in the pot and securing the point of crossing at the top with a smaller wire.

But to return to hardy climbers. The clematis differs from both the rose and honeysuckle and has a habit of running up a few feet and then massing its foliage and bloom. For this reason it is adapted for training up the pillar of a porch, its inconspicuous stem making but little show, while its flowers develop nicely around the cornice above. For covering an arch above a small gate or decorating a summer-house the showy varieties of clematis are very suitable.

The woody-stemmed strong-growing climbers like wistaria and trumpet-creeper can be supported in two ways—either by making them cover worthless trees, ruins or old buildings, or making them self-supporting. The latter method is easily accomplished by setting a small pole of durable wood four feet high and planting beside it a strong vine. When the vine has been planted two years cut it back near the ground and allow three or four strong shoots to grow. Train these in a spiral direction around the pole (all one way), and by the time the post has rotted away the shoots will form a self-supporting stem. A head should be formed by pinching four or five feet from the ground, and more or less constant pinching will be required for a number of years. The result will be a little umbrella-shaped mass of bloom and beauty.

L. B. PIERCE.

FLOWERS FOR A GARDEN OF SMALL DIMENSIONS.

IF— "He is happiest who has power
To gather wisdom from a flower,"
then my friend who writes to me asking for information as to her little plot, and how to make it most attractive, may hope to be wiser and better for the lessons of the coming spring. Your ground is dug, laid out into a square bed and some triangles, and you do not wish to change; cut your square, with a well-defined mark, crosswise, and fill half with petunias and half with phlox drummondii. The corner beds should have pansies, mignonette and, as you want something white, a small bed of sweet alyssum, if you can keep it from the black fly. To do this, soak the seed in kerosene and roll in sulphur as for turnips. But for such a small plot it is far less disappointing to purchase of some reliable florist. Get good old-fashioned flowers, pinks and candytuft for odd corners, and all these I have mentioned flower through the whole season. Then two good hybrid perpetual roses—a *La Reine* and *Coquette des Blanches*—which will give you a pink and a white that will be a comfort to you till frost

comes. You have no room for shrubs, but a mahonia or American holly would amply repay for all the room it would take, because in spring its yellow bells in long racemes are very pretty. All summer the foliage varies from deep green to red, and you can go out at Christmas and gather some of the ripened sprays to decorate your rooms and give them a holiday appearance. It has never fruited with me, but I do not know of any shrub that gives more satisfaction all the year round. Your little garden can be made to do duty all the year, for in autumn you can put in a few hyacinth, crocus and snow-drop bulbs that will blossom early in spring. Your roses and annuals will flower all summer, and, when frost comes, the pansies and phlox will look as cheerful as at midsummer. A few seeds of mignonette with the petunias will give you a delicious perfume, borne upon every breeze, and if you have some house-plants to set beside the doorsteps and do not neglect them, you may have a garden that will prove a boon to the passer-by as well as a pleasure to yourself.

ANNIE L. JACK.

SUBSTITUTIONS.

THE April number of THE LADIES' FLORAL CABINET containing Mr. Lance's letter, reached me just as I had jotted down a few of my own experiences. To show how nearly alike we all suffer from "substitutions," and other "dark ways and vain tricks of florists," I send my paper just as written, but can hardly hope to have sufficient intuition to touch upon the "remaining points" to which he refers that could have ventilation with both pleasure and profit (a rare combination).

Mr. John Thorpe, in the January number of the CABINET, tells the readers to "beware of sharp-edged tools," and especially "lances." I do not write of roses—my sufferings are miscellaneous; neither have I attempted to handle the "sharp instrument," but after the lance the pricking of a needle is often beneficial in keeping open the orifice of a wound, that the healing process may begin from within and extend to the surface, thereby insuring soundness.

Mr. Lance says "he fancies most florists must have been amateurs originally;" such being the case I must stand as the connecting link, because, for the very love of it, I devote much of my time in assisting to raise plants for commercial purposes, yet I still have an amateur side to gratify. I can readily forego the "sealskin sacque" and "the love of a bonnet," but a plant, with a long list of adjectives attached, as so often described in florists' catalogues, catches me every time. Some of my ventures have never been revealed, even to the "bosom of the family;" if I had confided in him, he would have said, and truly, too, "I told you so."

My deep disappointments, humiliation and indignation are not shared by a living soul. One box I obtained from a prominent house. Well, I shall not attempt a description of the contents. My "great expectations" were crushed, and on the "sly" I slipped the plants, one here and another there, under the staging in the green-houses, where there was no danger of their being singled out from scores of others. Then I put on a cheerful face and went bravely on as though heartaches were unknown in the world of florists.

Seeds, with their glowing possibilities of new varieties, tempted me, and I invested in several packages of English novelties at 75 cents each, among which was one of blue primroses containing half a dozen seeds.

I considered myself fortunate in getting these, and sowed them after the most approved method; watched them carefully, and when one tiny plant peeped up I was fairly jubilant. I stood guard over it during the day, gave it an affectionate "good-night," and greeted it first of all my treasures in the morning during all its period of infancy. After what seemed to me an interminable length of time it opened a flower of mean, dingy red, not even a good common sort. This watching and waiting had been too apparent to escape notice. I had to

run the gauntlet of remarks, the instrument sharpened as only a *blue* primrose could. It was not a lance, but was larger than a needle and dreadfully irritating.

A "white agapanthus lily" was the next "floral treasure" to take possession of my senses. This also came from a large firm. I do not allow myself to be humbugged in a small way. It was a nice large plant, and only kept me at its shrine for about a year waiting to greet its snowy petals. Then it showed a flower stem. True, it was hardly discernible to a casual observer, but to my strained vision there was no mistaking it. It seemed to enjoy my suspense, for it tarried long in the bosom of the parent plant; but it finally dragged its weary length along, and after a while "showed its colors." This disappointment, too, was outlived.

The next came from a handsome catalogue that had been and still is an annual visitor at Maple Grove. It has beautiful covers, a handsome colored plate, and is replete with things new and old, if "figures don't lie." I saved up my pennies until they amounted to a few dollars and made selection of some of the novelties. Ere long I was summoned to appear and claim a basket directed to me. Imagine my chagrin when not one of the plants I had so much coveted was there; the pill was a bitter one, but I swallowed it without a capsule. This time my confidence was somewhat shaken, the bitter taste remained a little longer than usual. The same bright-colored catalogue made its appearance for two successive years before I was ready to be bitten again. But the pennies were once more hoarded until the amount needed was gained, and I made my selections with all the confiding innocence of youth and inexperience.

A basket came promptly to hand, and I expected to be greeted with both bloom and foliage. It chilled my ardor to find the basket so carefully wrapped, for it was warm weather, and upon opening it the first plant looked familiar, but I reasoned with myself that it was put in for the "extras" that ladies so delight in, and the next would be what I had sent for, but such was not the case. Again I had missed every plant I had sent for—got old stock and paid novelty prices. I did not give the firm "a piece of my mind;" I knew I could not do the subject justice. As there was nothing else to look at I turned my attention to the basket. That was nice. It was unlike any I had ever seen used for shipping; I have it yet, and, in the language of Mrs. Partington, I intend to keep it as a "momentum."

Possibly it will be thought I have related my life experience, but a recent acquisition proves otherwise. The old adage, "Experience is a dear school," does not hold good in my case—there must be a "middle point" somewhere for me.

To the hard-working farmer's wife who pines for something bright to rest her weary eyes upon after the dinner-things are put to rights, this failing to get the flowers of

her choice is positively inhuman, and to those who work in office or shop for their daily bread and who still crave the fragrance of the flowers that used to be in the "old home," it is equally cruel, for from such as these the pennies are literally "saved up."

Women are more frequently the victims of these small wrongs, yet they are denied even the luxury of giving expression to their perturbed feeling in the only way Mr.

Lance suggests. Men do not condone profanity in a woman, no matter what the offense. I pray they never may.

I would not give the impression that I think this kind of thing is done with the knowledge of the proprietor, for careless employees perpetrate just such outrages, and especially is it so with small orders.

I know full well of this evil; how shall we remedy it?
 MAPLE GROVE, Ohio. MRS. E. BONNER.

SOME CALIFORNIA WILD-FLOWERS.

THE plains now are a lovely sight, and to a stranger seem like a glimpse of Paradise. Flowers of the loveliest colors are so abundant that it is almost impossible not to trample them.

Perhaps everyone may not know just what we call the plains. A short drive out from town brings us to long stretches of dry, hot sand reaching in many places to the foot of the mountains. In summer this sand-bed is anything but a pleasant sight, for the scorching sun pours on the dry stalks of shrubs and shows nothing green for miles save the sage brush and cactus. Then, it is impossible to imagine a flower growing there, but after the winter rains the seeds that have so long lain in the hot sand germinate, none the worse for their months of baking. Now the ground is well soaked, for we have had very heavy rains this winter, and the plains are covered with grass and alfalfa, a favorite food for cattle and sheep.

There is a thorny, scraggy-looking shrub (*sarcobatis*) that bears the loveliest clusters of pale blue and white flowers, very fine, somewhat resembling spiræa. Greasewood it is called, and the wood is very hard and used for fuel. Under these bushes and in every sheltered nook it can find, grows a frail little flower, something the shape and size of a buttercup, and blue as the heavens. I do not know its name [Probably *Myosotis sylvatica*. —ED.] but some call it the wild forget-me-not. It has little or no fragrance; few of the wild-flowers have. Then there are the bluebells. They are something like the Canterbury bells, only smaller and of a dark blue color, almost purple. Several times I have tried transplanting them into my garden; they are prickly to handle and it is not a pleasant task, but I hoped with cultivation to develop something, perhaps, really fine. All my attempts proved failures; they pined away and died in spite of the best of care.

Some of the wild-flowers improve by cultivation, but not many. The poppy does best of any, with exception of the yucca or Spanish bayonet. This always does well and blossoms beautifully in a garden. The Indians use the tall succulent stalk of the yucca for food. After stripping it of its flowers they cut it into short lengths and bake the pieces, eating, of course, the inside. We tried the experiment once, but found nothing palatable in the dish. It had a slightly sweet taste, but was stringy and tough. A much better food is the fruit of the cactus, which is sweet and somewhat like jelly,

without, however, any decided flavor. The cactus plants are really glorious when they are in full bloom. The waxen flowers are of various colors, and many shades of color. But if you try to get one of them, no matter how careful you may be in the handling, you are sure to feel as if the whole plant had thrust its needles into your flesh. There are a great many varieties of cacti, the most common one being the prickly pear. The old Spanish settlers made hedges of this, which formed an impenetrable wall many feet high, and the fruit was used as food.

The poppies are very brilliant; their deep orange color can be seen a great distance. Sometimes we find a yellow shade among them, and, again, some with striped petals. By cultivation we can raise *pure white* poppies from the same seeds that give us the deep-orange, pale-lemon and striped kinds. These are cultivated in the Eastern States and called the California poppy (*eschscholtzia*). Then we have a dandelion, a very light lemon with dark centre. I think it not nearly so pretty as the old-fashioned kind we used to gather on our way from school, and would blow the seed-balls to find out if mother wanted us. These dandelions have similar seed-balls, but are not so downy; more like chaff are the wings to float the seed; neither have they the long, tender stems.

We find many varieties of the lupine, from the dwarf to the giant kind four or five feet high. One variety that is of medium height grows into a bush and has leaves like silver satin.

There is another wild-flower, in shape like the calliopsis, with a bright yellow centre and white petals that are tinged toward their base with a delicate yellow. Sometimes we find the entire flower yellow. The Indian pink grows here exactly the same as in the Eastern woods —bright scarlet. There is also another variety, in color a magenta pink.

Morning-glories twine about the other flowers that happen to grow near them, looking up so innocently, while they are strangling their neighbors with a deadly grip. The pea vine (*astragalus*) is better and selects a good strong shrub to climb on, sending down such lovely pendants of flowers. One plant has a white flower resembling a pea blossom, but not at all showy until it seeds. Then its pods are like little balloons strung together, and when the wind blows, these little pods with their seeds make a sound like the warning of a rattle-

snake. The children call it rattlesnake weed for that reason.

Bunches of yellow violets lift their sweet faces, looking like a dear familiar friend in a crowd of strangers. There is a little shooting-star [*Dodecatheon media*.—ED.] which I thought belonged to the cyclamen family, for the flower is exactly like the blossom of a cyclamen; but a florist told me that any relationship between them was impossible as the cyclamen had a bulbous, and this a fibrous root. There is a pretty cigar plant, with its tall head fringed with long scarlet trumpets. Later in the season comes the scarlet larkspur, also the purple and light blue. The scarlet is very showy, having a particularly brilliant color.

Most of the wild-flowers are very fragile, and wither as soon as broken from the stem. The prevailing color is yellow. We find hundreds of varieties of flowers, and more than one-half nearly the same shade of yellow. Looking far over the plain it seems to be one unbroken mass of yellow, like a carpet of gold stretched across the country. We have golden sunshine, golden flowers and golden fruits in this golden State of California.

Some of the premium seeds sent this year with the CABINET I have planted and many of them are up and growing nicely. The asters are an inch high. One variety of everlasting measures two inches from the ground, and the Chinese pinks about half an inch. I planted some hollyhocks a little more than a week ago and they are up and pushing ahead each day. Verbenas and petunias blossom the year round; the slight frost we sometimes have seldom does them harm. Once

plant mignonette here and there is no getting rid of it. We planted some one year and it has been treated as a troublesome weed ever since.

Someone gave us a root of pretty striped grass for ornamental bouquets, so we watered and tended it until by-and-by it began to grow coarse. The next season it had grown taller than the house, then we found it was cane.

I wish you could see my bouquet that I have on the table before me, gathered in the garden this afternoon. It contains some large buds of Bon Silene and Safrano roses, others just half opened of La Marque and Cloth of Gold, some immense Marshal Neil roses, a couple of rich Jacqueminots, a lovely tinted La France, a couple of beautiful clematis blossoms, a cluster of orange-blossoms and a sprig or two of heliotrope.

The trees from which I gathered the La France, Bon Silene and Safrano roses are so tall that it is impossible to reach the top without a step-ladder. I have tried to grow roses from many different florists, and find those from the "Dingee & Conard Company" are very satisfactory. As soon as the plants are put into the ground they seem to take a long breath, stretch their roots and begin to grow without further trouble. Many others here agree with me in preferring their plants for reliable and hardy stock. Rose cuttings put into the open ground grow readily, and the next year finds them with strong roots. Geraniums of all kinds are quite common, they are hard to kill; we dig them up and throw them into the street, and even then they keep fresh and green for a long time, and even try to grow. H. M. M.

SAN BERNARDINO, Cal., March 23, 1886.

ACHANIAS.

THOSE who are acquainted with this beautiful plant never cease to wonder why it is not more common, so well adapted is it for the open border, the greenhouse or the window-garden. My experience with it for several years past has been such as to awaken a desire to introduce it to those readers of THE FLORAL CABINET who may be strangers to it, that they too may derive pleasure from its culture.

The achania is a native of tropical America and was introduced to the flower-loving community late in the last century. It belongs to the natural order *Malvaceæ*. Its name is from the Greek word *akanos*, meaning closed, given because the corolla does not open wide, but seems to wind about the stamens that project beyond it an inch or more. It is a plant or shrub that will grow to a height of five or six feet, or, as it bears pruning well, can be kept within almost any desirable limit. It has a hardwood stem and heart-shaped pointed foliage. Its blossoms, near the end of each branch, are axillary, bright scarlet, and very profuse at all times of the year, and the seeds, when it does seed, as it never has done with me to any extent, are said to be highly ornamental, changing from white to a bright red.

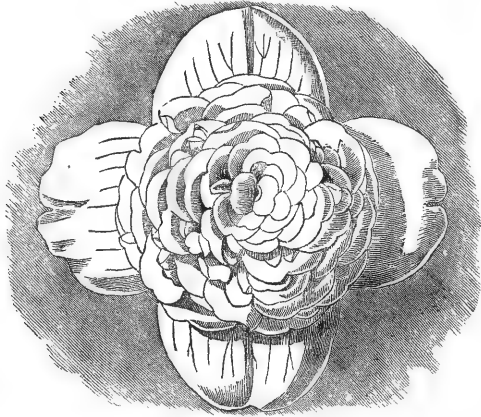
The achania does well in any good garden soil, but that which is best adapted to it is two parts soil, two parts leaf-mould and one part sharp sand. It grows readily from cuttings, but requires some care in moving, as it naturally forms a tap-root of considerable length with comparatively few fibrous rootlets. When wanted for house culture the best way is to plant a well-rooted cutting in a six-inch pot and plunge it in the ground, letting the bottom of the pot rest on a stone to prevent the roots growing through. It may be best before taking it into the house to shift to a little larger pot; this will be determined by the size of the plant.

The great desire of the plant is water and a moderate temperature. It is one of the first to show the effects of drought, and its drooping leaves give early notice of its thirst. It is also very susceptible to cold, and when in the window-garden its foliage will show at once when the temperature is 45° or less, although a slight frost will not injure it further than to destroy its leaves. I know of no other hard-wood plant so susceptible to the effects of drought and temperature. Cuttings made in June will attain sufficient growth to blossom nicely the next winter.

L. A. R.

TUBEROUS BEGONIAS.

TUBEROUS begonias have made, during the last year or two, a wonderful advance, from the horticulturist's point of view, as well as in the estimation of the public. So rapid, indeed, has been the change that already such species as *Veitchi*, *Fräbeli* and *Pearcei* seem



BEGONIA MADAME MARIE.

to belong more or less to the past. Happily the original parents were so hardy in constitution that we find the endless progeny now in cultivation growing and blooming with more or less freedom and constancy in the flower beds and borders. William Early, a correspondent of the *Gardener's Magazine*, describes as follows his experience with this class of begonias:

"Although these very beautiful and showy plants prove so hardy and enduring, excellence of pot-culture is more the exception than the rule. I am far from saying that examples of skillful culture are not to be met with in many places, but I take my text from the numerous collections shown at the various horticultural exhibitions throughout the country, and I unhesitatingly assert that, with very rare exceptions, the begonias shown are surprisingly poor. Why this is so is a question which naturally arises in the minds of all devoted to horticulture, and who are anxious to see excellence of culture all round. It appears very strange that one exhibitor should grow them so well, while another should not be able to produce really creditable examples. The explanation appears simple to me, and when I have given my opinion with reference to the matter I shall be very glad to hear what others have to say. That these plants will grow slowly and bloom very freely in the open ground need not be explained. Here, then, is the fact that they like free exposure to sun and air. These two conditions can be assured them in airy greenhouses, not unduly shaded by artificial means. Owing to the lateness of our springs the tubers do not start into growth until quite late, and it therefore is well, where the convenience exists, to start them

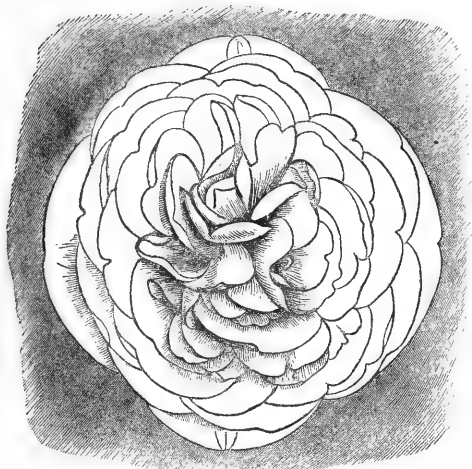
in artificial heat a month or so earlier than they would commence to grow without such aid. After they have begun to grow they may be returned to the greenhouse. My intention is nevertheless to explain their culture in the greenhouse.

"Tuberous begonias, although they succeed when planted in open borders, require some amount of preparation under glass previously. So, also, owing to our late spring, greenhouse-grown examples require a certain amount of artificial heat to start them into growth, and also during the months of June and July to maintain them in a progressive state. According to my experience they do not commence active growth in the cool houses until the month of June is near, or has actually arrived. Anyway, it is well to fix a date when extra artificial aid will be of material assistance, and happily the date for affording suitable aid is one when artificial heat will be most beneficial to many other subjects. In the second or third week of June, when all bedding plants have been disposed of and all hardwooded plants have also been placed out of doors for the summer, increase the temperature materially by starting the fire and carefully utilizing the sun-heat. With the begonias may be associated coleus, fuchsias, oleanders, hydrangeas, abutilons, cacti, justicias, *Lilium auratum*, ferns, Indian azaleas making new growth, achimenes and gloxinias. At this time, as they require higher temperatures and additional atmospheric moisture, shut the greenhouse up early in the afternoon and keep it closed early in the morning. Syringe all the occupants freely, usually about three o'clock in the afternoon, allowing the sun to shine full upon the plants, while no air is allowed to enter the house. It will not matter if the temperature rises to 95°, or even 100°.

"To insure a firm, short-jointed growth admit air daily somewhat freely for an hour or two, about midday being the most suitable for ventilation. These surface syringings appear to me to be an essential part of the details,



BEGONIA FULGURANT.



BEGONIA M. PAUL DE VICQ.

although it is imagined by some that they do not like water upon their leaves. The fact is, they enjoy it immensely. If, while active growth is in progress they are lightly sprinkled many times daily, they will be found to grow all the more freely and stout. Indeed, I have some idea that the immense success of Messrs. Laing & Co. may be due to this simple fact, having observed that even during the time their splendid collection of these flowers was at the recent exhibition at South Kensington, the plants, though in full bloom, were freely damped overhead. But I go beyond this, having found plants of good varieties grown in five-inch pots so treated succeed admirably, forming leaves nine inches long, beautifully veined, and bearing from ten to twelve spikes of bloom. Some of these plants had not been fresh potted since last year. When the plants have been grown on sufficiently to show flower, airy shelves suit them admirably, but with the sprinklings overhead still continued when the sun does not shine too powerfully upon them.

"Tuberous begonias do not require large pots or large shifts at any time. Like most other plants of rapid growth and blooming, they like to be root-bound, so that they can receive copious supplies of fresh water without any danger of the soil becoming waterlogged.

"To those who have not hitherto succeeded with the tuberous begonias I strongly advise and suggest such treatment as the above, in preference to the use of large pots, too abundant quantities of rich soil, and dense shade without free sprinklings, which are most favorable to active growth. Weak liquid manure is of great aid to these plants when grown as I have suggested. Finally, I would suggest to those who would really excel with collections of these plants the desirability of making selections from among the innumerable varieties now offered, and with due regard to the character of the structure in which they are to be grown. If the house be low roofed and light and tolerably free from climbing and tall pot plants, any type, including those of pendent habit, may be selected. For all shaded structures, especially such as have the stages some distance from the glass, as is too often the case, the varieties tall in growth, with pendent flowers, or dwarf varieties, with erect spikes of

bloom, should alone be selected. Nor should the grower omit to obtain well-known hardy strains when bedding-out is contemplated. Seedlings from *Begonia Worthiana* give greater success than can be anticipated from such as have long bending flower-stalks and large irregular flowers."

One of the latest novelties, and one that seems to promise well, is the double-flowering, tuberous-rooted begonia. H. Cannel & Sons, Swanley, England, are making a specialty of these plants and speak of them as follows: "When wired like a camellia, these flowers for bouquets or buttonholes add a charm not easily forgotten. They are tiptop of the fashion this year—yes, and for years to come—and are as lovely and choice as orchids. Their cultivation, like the singles, is as simple as can be, perhaps the greatest difficulty is not to forget or neglect the bulbs when in a dormant state; all the culture required is propagation like the dahlia. Next year put the potato-like root in a five-inch pot, place in a cool greenhouse, near the glass, and it will grow itself into one of the most lovely-shaped plants ever seen. Neither insect nor disease seems to attack them."

Our illustrations give a good idea of the form of the flowers and are nearly life-size.

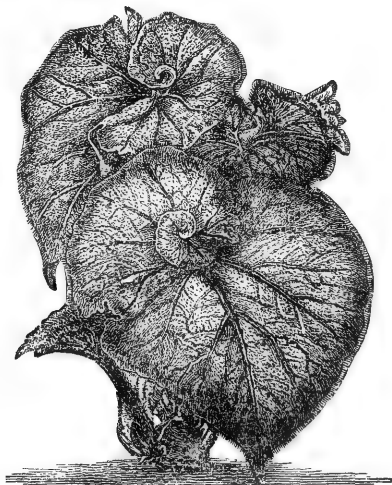
Mme. Marie has large flowers of a beautiful delicate salmon.

Fulgurant has deep crimson flowers, very double and full, and is a remarkably free-flowering variety.

The flowers of M. Paul de Vicq are well formed and very double, bright carmine-cerise, of a very pleasing shade; distinct and good.

The ornamental-leaved begonias have lost all or nearly all the popularity they once enjoyed in this country, and are only rarely met in private collections. We regret this, because of the real beauty the plants possess and for the lessons to be learned from the leaf when made a study.

We illustrate also a very curious form, Comtesse Louise Erdödy, which we have taken from Cannel's list. The engraving conveys a correct idea of the distinct spiral-like centre of the leaf.



COMTESSE LOUISE ERDÖDY.

TWO NOTABLE FLOWER SHOWS.

KLUNDER'S FLOWER FESTIVAL.

ALL the world of flower lovers thronged the Metropolitan Opera House those blustery March days when Mr. Klunder, florist and artist, gave his annual exhibition. It was a notable event in floriculture, while Miss Flora MacFlimsy and her kind welcomed such a diversion during the Lenten days. Truly, the presiding genius need carry a magic wand—disguised from unbelieving eyes in the form of a big blue pencil—to evolve such fairyland in the midst of everyday New York. But when one has a wealth of flowers and stately plants, a beautiful hall, an artist-florist with an artist-botanist at his side, what is needed to make a surpassing exhibition? To begin at the beginning, as the children say. On entering the foyer the general effect was decidedly Christmassy, the woodwork being wreathed with laurel, while at intervals on the stairways were palms and large india-rubber plants. On either side was a counterfeit English garden, defined by evergreen hedges. There was a real lawn, the turf of which was forced in sections for the occasion. Everything that is *forcible* has been forced in the way of flowers, but this grass was certainly novel. It was not, however, real, true grass, but oats, which appeared to be “sicklied o’er with the pale cast of thought,” but it created a good deal of enthusiasm nevertheless. These mimic gardens were planted with hyacinths, tulips and narcissi, with a border of violets. It was not particularly English, but very charming all the same.

The first view of the interior was certainly bewildering. The long ranges of boxes and balconies were draped with a wealth of palm-leaves, the lower tier further decorated with bunches of roses and tulips. The proscenium arch was a veritable arch of triumph, covered with palm-leaves and evergreens, showing beyond an apparently endless vista of blossoms.

The floor of the auditorium was divided into three aisles, so to speak. The centre one was bordered by grand specimen plants on pedestals draped with Florida, moss or ivy. In front of each pedestal stood a great majolica jar filled to overflowing with exquisite roses, only one variety in each jar. These flowers were arranged with a careless grace that was not the least admirable feature of the exhibition. Alternated with the foliage plants were tables filled with blooming pot-roses. A conspicuous feature near the door were two pyramids about fifteen feet high, one composed of pot-roses, the other of azaleas; one capped by a palm, the other, an india-rubber tree. These pyramids were fringed at the base by small plants—pansies, lilies-of-the-valley, violets and ferns.

A large tree-fern, *Dicksonia antarctica*, received much admiration. It was about sixteen feet high, with a beautiful palm-like head. At its base was a mat of the dainty *Adiantum cuneatum*, which bore the change and tem-

perature of the place marvelously well. This was flanked by fine specimens of *Cycas revoluta*, which excited much notice from the unbotanical public, though it was hard on the horticultural writer's sensibilities to be asked by a young woman in a red bonnet and a state of wild enthusiasm if it was an *orchid*!

There were two rugged, hoary palms—palmettoes—from Florida, tropical patriarchs, probably thirty to forty feet high. They had a somewhat careworn aspect, but they added much to the tropic appearance of the place. They were without roots, being merely the trunks and foliage; the base of each was hidden very artistically with moss and small plants. Skirting the boxes was a fringe of handsome flowering plants or stands of cut-flowers, and here and there a flaming chorozema, or a lavish mass of hybrid roses.

Many were the visitors who lingered over the little *Cephalotus follicularis*—the plant is not quite as large as its name—ferociously labeled a flesh-eating plant. For the greater security of visitors it was securely confined under a strong glass shade. It is shaped like a nepenthes, or pitcher plant, and does not at all bear out in appearance its terrible reputation. It has a well-fed, double-chinned aspect and wears two rows of little hairs down the front of its plump waistcoat.

Sarracenia Courtii, another of the carnivorous plants, was there, too, but it has a Mephistophelean look, more in accord with its character.

Of wonderful roses there was no lack. Royalty itself was present in the person of “Her Majesty,” on whom the cares of state pressed heavily, judging from her weary aspect. Comment on this rose would be out of place here, as the specimen in question had been open for eleven days, and was certainly far advanced into the sere and yellow leaf. “Her Majesty” was given a place apart from the common herd, with two maids of honor, Baroness Rothschild. As there is a great similarity in color between the two, the general public fondly believed all three to be “Her Majesty.” With a backing of graceful *Acacia dealbata* and adiantum these roses were quite a centre of attraction.

A little stand in the centre of the archway showed a harmony in white—a graceful bunch of the new white rose, “The Bride,” side by side with a vase of the snowy hybrid, “Merveille de Lyon.” The latter is like a Mabel Morrison, only more so.

But the one thing that everyone wanted to see was a genuine tree stump with real, live orchids growing upon it. There was a suggestion of East Indian luxuriance about it that captivated all imaginations, and a first glimpse of the rugged, moss-draped stump invariably produced a perfect chorus of ecstatic adjectives. And these orchid groups were well worthy of the admiration they evoked. The arrangement was grace itself, with the oddly-formed plants and gorgeous flowers nestling in

their bed of Florida moss. Many of the flowers were, of course, cut, but they were very ingeniously arranged, with the stem in a tiny vial of water, so placed that they appeared to be growing. There was also a very charming table of cut orchid flowers.

In the centre of the stage was a fountain most beautifully adorned with a mass of lilies in the midst of sparkling spray, illumined by innumerable jets of electric light. First was a mass of callas, then *Lilium candidum* and *longiflorum*, lightly draped with filmy asparagus. These were surrounded by a wire netting, jeweled with electric light. Outside this was a fence of tall lilies, fringed with lilies-of-the-valley. Nothing more purely lovely than this mass of lilies can be imagined.

Back of the stage was a crescent of mirrors, increasing the apparent vista to an illimitable extent, and reflecting the nodding heads of another solid phalanx of *Lilium longiflorum*. At either end of this bank of lilies was a bank of primroses mixed with filmy ferns. At one end were Chinese primroses, at the other the dainty little yellow English flower, calculated to bring rapture to every British heart. These little strangers are rather spindling and delicate under our alien skies, but they turn up their modest little faces as bravely as on the old battlefield of Worcester, where they grow rank and luxuriant in the dust of dead and gone Roundheads and Cavaliers. Forget-me-nots and mignonette next claimed our attention, a great bunch of the blue-eyed flower of memory, with mignonette so sturdy and luxuriant that it stands to most of its class in the same relation that Jack's beanstalk bears to the everyday vegetable.

In another corner "the wallflower scents the dewy air," side by side with ten-weeks' stock, a very fragrant though not conspicuous group.

Here everyone paused to wonder over the eccentric flower of a palm, carefully wrapped in a prickly sheath, to preserve it from the attacks of monkeys. (A similar sheath over most rare flowers would be regarded as a boon by the exhibitors at many flower shows, where the card, "Please do not handle," appears to be accepted as an invitation to touch by the sight-seers.)

There were fine cinerarias and a forest of hyacinths and tulips, making the air heavy with perfume; there were geraniums and carnations—indeed, there was the wealth of half-a-dozen greenhouses.

Of the few noticeable floral designs, the most remarkable one was a baptismal font of white flowers, roses, carnations and camellias, fringed around the brim with lilies-of-the-valley. Resting on the edge were four spotless doves. A floral fan on an easel was very charming, so were some bouquets. A bridal bouquet of Cook roses and orange blossoms was much admired.

Certainly, the great flower-show of the season was a grand success, though it leaves a bitter taste in the mouths of those flower-lovers who believe in the destiny of the New York Horticultural Society. Why must a private individual make a mammoth show and a mammoth success, while that organization must content itself with its present modest efforts?

HODGSON'S ANNUAL EASTER EXHIBITION.

The great exhibition in the Metropolitan Opera House had scarcely become a thing of the past when it was followed by the bright and tasteful show of the New York Horticultural Society. This in turn gave place to Mr. Hodgson's annual Easter exhibition, so the person who did not attend a Lenten flower show was most decidedly "out of it," as the British say. Truth to tell, we are getting somewhat surfeited in this matter, and though the last-named show was a success artistically, we understand it was rather discouraging financially. How much of this was due to lack of "lady patronesses" and newspaper notoriety we cannot presume to say.

Assuredly, the show possessed all the qualities worthy of success. If we may draw comparison between the Metropolitan and the Cosmopolitan shows, the former displayed the best flowers, the latter the best plants.

The arrangement at Mr. Hodgson's exhibition, while rather careless in some respects, was, on the whole, pleasing and graceful. But how could it be otherwise than graceful when there were latanias that provoked a whole shower of adjectives, cycads that were, in the language of the æsthetes, living poems, and a great monstera, or philodendron, with its oddly slashed leaves and eccentric growth, all massed together like a tropic jungle.

First impressions of the hall were very pleasing. The sightseer looked through a long vista of brilliant flowers and graceful foliage to a background of tropic leaves arranged against some well-painted scenery with so much art that the living plants mingled their shadows with the painted ones. At each side of the entry was a square bed of multicolored flowers, arranged in three tiers. The centre of one was composed of marguerites, the two lower tiers many-colored tulips, hyacinths and narcissi. At each corner was a fine specimen of *Dracæna draco*, the dragon-tree of the Canary Islands.

These dracænas were arranged on pedestals massed with spiræa, begonia rex and lycopodium.

The other of these square beds was a miniature Field of the Cloth of Gold. The centre was a mass of genista, or yellow broom, first cousin to the little plantagenet worn as crest by the royal family of England, until fate extinguished the Plantagenets and their crest together. The lower tiers were bulbs of flaming hue, and at each corner a specimen plant of genista, formed a drooping mass of soft yellow.

There was a table filled with feathery ferns beyond all praise, while an adjacent table of cacti and such oddities formed a most effective foil. A great spreading india-rubber tree stood on guard over the cacti. There was the old man cactus, with its venerable crown of silver hair and a variety of forms that resembled nothing on land or sea so much as a fleshy green octopus, like the botanical gems that adorned Mrs. Pipchin's parlor.

The display of orchids was not very large—there were some very fine cypripedium plants and a few others of this class.

Of course "Her Majesty" graced the occasion with her presence. There was a genuine living plant, bearing two flowers, and there was a vase with two cut-blooms, the

latter being remarkably fine. The writer's personal estimate of this rose is not a very high one, but the cut-flowers above mentioned must be commended for their size, if for nothing else.

Her Majesty was the only new rose exhibited here; the Bride was conspicuously absent and American Beauty was also invisible. Masses of flowers were displayed in big majolica jars, though in less profusion than at Mr. Klunder's show. A huge jar of faint-hued lilac excited admiration.

Much attention was bestowed on the odd lattice-leaf plant, *Ouvirandra fenestralis* (illustrated and described in THE CABINET for April, 1885). It is an aquatic plant from Madagascar, with skeletonized leaves, growing entirely under water. The flower is small and inconspicuous, but in this case some flowers of *Nymphaea Zanzibariensis* were stuck into the pot, giving the general public the impression that they grew there. The lattice-leaf plant occupied one end of a glass aquarium, and the remainder of the space was filled with climbing asparagus. As this was also in the water, it was described by many of the beholders as an aquatic fern.

A square bed of azaleas was much admired; the plants were well grown and just in the condition for exhibiting. Corresponding in size with this was a bed of marguerites and hydrangeas.

The pot-roses were undoubtedly the poorest feature of the show. There were several tables of these and not a single good flower on any one plant.

A great beaucarnea from the Philippine Islands was very noticeable, with its slim trunk surmounted by a drooping tuft of slender leaves; a mass of handsome crotons was grouped about its base.

Well-grown palms, latanias and arecas were placed about the hall. We must, however, take exception to their pedestals, which were made of rough boards after the model of a rural tree-box—they only lacked a coat of whitewash to be complete. No attempt was made to disguise these erections. They frankly stared upon the beholder in all their native ugliness.

Along the edge of the balcony were hanging-baskets of flowers and ferns, varied by cages containing gaudy birds, parrots, toucans, minos and cockatoos.

But the prettiest effects in the entire place were pro-

duced by the grouping at the end opposite the door, where two giant tree-ferns stood sentinel over a tiny lakelet embowered in foliage. The tree-ferns had pink bougainvillea and dainty seaweed lightly laid on their brown trunks, making a very pretty effect.

The little lakelet was really charming. It was nature itself with its gravelly bed. Stately papyrus bent its graceful head over one side, while in front was a bank of *Anthurium Scherzerianum*. The flaming tongues and dark-green leaves of the anthurium formed a most effective decoration.

Passing through an evergreen arcade beyond the fountain we entered into the bridal reception room. This was certainly disappointing. Plenty of flowers were used and plenty of good plants, but the "make-believe" room looked cheap and tawdry, and no lavish use of flowers could redeem it. Instead of the single marriage bell there were three lightly looped together by white ribbon. The inside of the largest bell was very prettily made in spiral scrolls of pink and crimson carnations.

A bank of tulips in front of a mirror looked very well, and a group of foliage plants—*Anthurium andreaeanum* and fine palms—was well arranged, but elaborate crescents and scrolls of roses looked out of place on the white muslin walls, and the mantel, handsome enough in itself, had a painfully temporary appearance.

There were masses of *Lilium longiflorum*—that goes without saying—and quantities of lilies-of-the-valley. A flower show at this season without lilies would be "Hamlet" with the melancholy Dane left out.

The display of hybrid roses was not so large as might have been expected. Curiously enough there was also a scarcity of Perles and Bon Silenes, but there were superb specimens of La France and fairly good Mermets.

A careful consideration of this show makes first and last judgments coincide; a great flower show it was not, but it may take high rank as a display of fine plants. In this respect it recalled the palmy days of the New York Horticultural Society, when Madison Square Garden was filled with a mass of rare plants and eager sightseers.

We want New York and its neighbors to see a great chrysanthemum show next autumn given by the Horticultural Society, something colossal, that will utterly extinguish everything of the kind before attempted. Who will form in line for this undertaking? E. L. TAPLIN.

THE VEGETABLE GARDEN.

CABBAGE.

THE soil most suitable for producing a satisfactory crop of cabbage for late fall and winter use is a heavy, sandy loam, although any other will answer as well providing it is thoroughly and properly prepared. It is customary with most of our amateur and professional cultivators to raise the crop on ground that has been previously occupied by an early crop of peas or potatoes, and the result has been so satisfactory that I cannot too strongly urge the more general adoption of this plan.

After the early crop has been gathered and all refuse removed or destroyed, a good dressing of well-decayed stable manure should be given and ploughed under as deeply as possible. A thorough harrowing should then be given so as to pulverize the ground as finely as possible, and then it should be marked off into rows three feet apart one way by two feet the other. At each intersection a little concentrated or chemical cabbage fertilizer should be scattered and as thoroughly incorporated with the soil as possible by means of the hoe, at the same

time forming a slight hill in which the plants are to be placed.

Planting should be done about the middle of July, although a week earlier or later will not make any particular difference; it is best to do it just previous to or after rain, care being taken to place the plants down to their seed-leaf, no matter how long their stems may be, and also to firm the soil down well around the roots. Care should also be exercised in removing the plants from the seed-bed; they should be lifted by means of a fork and on no account should they be pulled up.

After the plants commence growth and until the heads commence to form they should be thoroughly cultivated and freely hoed, and at each hoeing let a little fresh earth be drawn up around the plants. The plants can be raised from seeds, which should be sown on a nicely-prepared border about the 10th of May. Sow very thinly in shallow drills about one foot apart. Just as soon as the young plants make their appearance they should be freely dusted with tobacco dust or soot, as a preventive against the attacks of the cabbage flea, and this should be repeated once or twice a week until the plants are large and past all danger of injury.

Of late years the green cabbage-worm has proved to be very annoying to cultivators, and in many instances has destroyed the entire crop. It appears to be more destructive where only a few hundred plants are grown; therefore it is advisable to cultivate a larger crop than is actually needed in order to insure a satisfactory supply. To destroy this pest very many remedies have been offered and but few of them appear to be of any value. One of the most simple and effectual consists in thoroughly sprinkling the entire plant with strong tobacco water, and repeat this as often as necessary.

To preserve cabbages for winter they should be lifted in the fall before severe freezing weather sets in and removed to a dry and sheltered part of the garden and placed in rows, head downward, as close together as possible; then cover the heads and stack up to the leaves with earth placed in such a position as to shed the rain, or like the letter V inverted.

The best varieties for general cultivation are the following:

Late Flat Dutch.—This is a low-growing variety with large bluish-green broad, flat heads, and is an excellent keeper for late winter use. It is by some considered to be far superior in tenderness and flavor to the Drumhead, and is a general favorite with our market gardeners.

Late Drumhead.—This is a large, late fall or winter variety, having broad, flat heads on a short stalk or stem. It is an excellent keeping sort for late winter use.

Marblehead Mammoth.—This is the largest variety in cultivation, heads having been grown weighing thirty pounds. In good soil, with proper attention, they will average over thirty pounds each. Heads irregular and variable in shape and in quality somewhat inferior to the other sorts, but indispensable for show or exhibition purposes. Keep the plants three feet apart each way.

Red Dutch.—This is used exclusively for pickling or

eating raw. It produces medium-sized hard, oblong heads of a dark purple color.

Drumhead Savoy.—This produces curled leaves, grows to a good size and is a certain header. It is the best of all the Savoy cabbages and closely resembles the cauliflower in delicious flavor.

KALE OR BORECOLE.

Under the rather indefinite name of borecole or kale we have a class of the cabbage tribe that does not form heads; the leaves are recurved, open and curled, and make excellent greens for winter and spring use. The parts used are the crowns or centres of the plants, which are cut off at the surface so as to include the leaves, which usually do not exceed nine inches in length, and they are in a proper condition for use after they have been exposed to several moderate frosts. They are among the most tender and delicate of the cabbage tribe and it is surprising that they do not receive that attention to which their merits entitle them. They are very hardy and will remain over winter in any place where the thermometer does not fall below zero.

They require to be grown in a deep, well-enriched soil, and to secure this the ground should be given a good dressing of well-decayed stable manure, and this should be ploughed under and a thorough harrowing given so as to level it as nicely as possible, then mark off into rows about two feet apart each way. At each intersection a little concentrated cabbage fertilizer should be scattered and thoroughly mixed with the soil by the hoe, at the same time forming a slight hill, in the centre of which the plants are to be placed.

Planting should be done just previous to or after rain, as directed for cabbages.

In order to secure good plants the seed should be sown on a nicely prepared border about the first week of May. Sow very thinly in rows about ten feet in length and one foot apart, and keep them well cultivated until they are planted out.

After this the only care necessary will be to keep the growing crop well cultivated and free from weeds until it is required for use. But do not attempt to grow this crop on land that has been previously occupied by cabbage, cauliflowers or turnips.

The best varieties for general cultivation are the Dwarf Green Curled Scotch and Cottager's Kale.

The former rarely exceeds sixteen inches in height, but spreads to about two feet in diameter. Its leaves are of a bright green color and are beautifully curled.

The latter is a comparatively new variety of dwarf habit, seldom if ever exceeding twelve inches in height. The leaves are of a rich green color and very much curled. It is very hardy, and more weight can be grown within the same space than by any other variety.

In gathering the crop for market it is the custom to cut the plant off at the surface, so as to include all the leaves, but amateur cultivators can gather the leaves singly if they desire to do so.

CHAS. E. PARNELL.

QUEENS, N. Y.

THREE DAYS' BOTANIZING IN MAY.

THERE is a plant that for a long time I have been anxious to see, as its beauty and rarity have so often been described, and now there seems to be a possibility that my desire may be gratified. Early in the month its location had been so carefully told me that I feel I ought to find it, although I have had no success in similar undertakings. Not long before, I remember saying to a botanical friend, "I never had found a location that had been described to me." "Of course not," he replied, "it was never meant that you should."

I do not like to think that there was any truth in his pleasantry, so I start on my walk with hope and high expectations, trusting that this time I shall succeed in seeing the plant which would be the crowning "find" of the day's quest.

Upon my way, of course, I botanize, as I always do when time will permit, and the first thing new for the season is the pretty, graceful early meadow-rue (*Thalictrum dioicum*), which I find on a rocky hill-side. Its drooping brownish blossoms—which a breath seems to move to and fro—in contrast with the delicate leaves, make it quite an attractive plant.

Columbine (*Aquilegia Canadensis*), clinging to the rocks wherever there is a handful of earth, gives brightness to the scene. On either side of the path as it winds its way around the foot of a high hill, Solomon's-seal (*Polygonatum biflorum*), with its row of greenish bells is nodding in the breeze.

The buds of *Smilacina racemosa* (false spikenard) are very large and will soon be in blossom.

Farther on two little ponds are bright with the water crowfoot, *Ranunculus multifidus*. The interesting part of this plant is the foliage, which is very finely divided into thread-like divisions; hence its specific name, *multifidus*. Sometimes in the early spring the stems and leaves are red, making the plant attractive before the yellow blossoms appear.

A friend in experimenting with it tried to persuade it to put forth flowers and to root in the earth like other plants, but has not as yet had any success. It grew well and made new foliage, but only this and nothing more.

I am now near the described home of *Leucothæ racemosa*, which belongs to the heath family. Its long, drooping racemes of bell-shaped flowers are said to be marvels of beauty, and I expect soon to be well repaid for my long walk. As its roots love moisture it is usually found in swamps or on the borders of ponds. I had two localities given me, one on the shore of a pond, the other in a swamp, and I have selected the one by the pond as being more accessible.

I follow directions as nearly as possible, examining every shrub that comes in my way, and finally conclude from some old seed-vessels that I have at last found *Leucothæ racemosa*. The plant, which ought to have delighted me with its brightness and beauty, has suffered

so severely from the extreme cold of the winter, it has nothing but bare life left, being entirely bereft of its means of adornment. This is a disappointment, but perhaps something will occur before I reach home, as is often the case, in way of compensation.

To turn back will be a long walk with nothing new to be seen; to go forward will give me a long walk, an enchanting hill covered with botanical treasures and then a quick way home by rail.

Forward I go, and after leaving the public highway ascend the hill, whose possibilities in the distance have seemed so great. The more common early spring flowers I pass by, appreciating and enjoying their beauty, but content to let them remain, as my botanizing has a purpose in view, and I only take those flowers which will be useful.

I want to make as complete a collection of violets as it is possible for me to do in this part of the country. So anything uncommon in that line will be particularly acceptable.

A shade of light violet attracts my eye, and I find upon examination a fine bed of *Viola canina* var. *sylvestris*, where the water trickles down by the path. This is a branched violet and usually blossoms all summer, although it is at its best in the spring. A little higher up the hill, at the base of a huge rock, my attention is next attracted by an uncommonly large violet resembling the *cucullata* in color, but differing in appearance from any that I have ever seen. I find that the leaves are cleft, hand-shaped, which convinces me that it is the *palmata*, a variety of *V. cucullata*. The finding of these remarkably fine plants of a variety that I have never before seen is an agreeable surprise and serves as a pleasant ending of my long walk.

Rhodora, that lovely flower of May that Emerson has immortalized in verse, is what I intend to look for on the second day. It is now the 21st of the month, and I can reasonably expect to find this beautiful flower at its best.

The place where I am going is new to me, but so near the railroad it does not seem possible that I can miss it, so I start from home the second morning expecting another pleasant day.

As I have seen very fine and abundant specimens from the place I am seeking, I expect that the lowlands will be aflame with brightness.

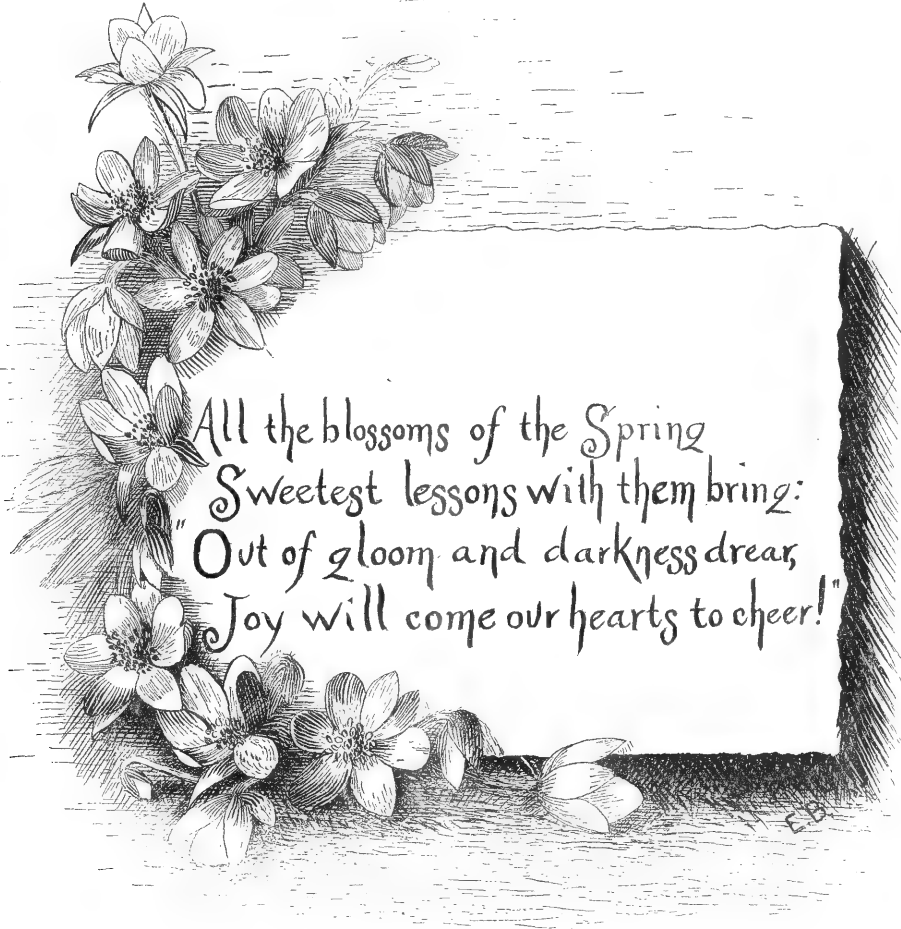
After much unnecessary walking, to make sure that I have thoroughly looked over the ground, I find a few blossoms, but it is very evident that the season is backward and I am too early for the show. (I visited the same place on June 5, and was amply repaid with as many flowers as I wished to bring away).

Whoever has botanized in May will remember the bright picturesqueness and extreme loveliness of the woods and hills. To me no other season has quite the charm that this has. In one particularly lovely scene

huge ledgy rocks jut out from the side of the hill. Rough and full of crevices is the background that Nature had to work upon. A little earth thrown here and there is the beginning, then a few spores and seeds wafted by the winds and dropped by the birds. Result—wherever there is a cranny or nook, a fern or plant has established itself. Strong bright *marginale*, delicate *Woodsia obtusa*, the clinging polypodium, or rock fern, and almost hidden in a crevice the rare beautiful *A. Trichomanes*.

The early saxifrage, with its clusters of small white

or not? I have looked and looked the locality over and cannot even find a single plant where I supposed they grew, so what would be the use to go again? But what would a collection be without the yellow, and so I try again. I have looked at the right of the path thoroughly, but have no success, and am about to turn homeward again, when whom should I see coming toward me but the friend who knows where the yellow violets grow, and I exclaim at once, "I never was so glad to see you, for I cannot find the yellow violets, and I have looked



flowers, is quite at home anywhere on the rocks where it can find foothold, and the graceful columbine, with its beautiful blossoms like torches of flame, is set singly and in clusters in the clefts, where one would suppose it impossible for a plant to find nourishment.

Large leaves of the bloodroot are at the base of the rocks, and a little lower down the hill are the pretty rue anemone and small Solomon's-seal. And as you ascend the hill you find the earth at the top aglow with the early buttercup.

The third day is devoted mostly to completing the collection of violets.

The purples and whites have been found, but the yellow, not common in this vicinity, still eludes me, and as the afternoon of the third day approaches I am almost in despair. Shall I take that long walk and look again,

the ground all over on the right of the path; where are they?"

"Why right here, to be sure, and this is the right of the path, just as I told you."

"Yes, but not the path I supposed you meant." And so the mistake had been caused by a misunderstanding. The violets found and gathered, I go home with a light heart; having secured also for my collection two bellworts, *Uvularia sessilifolia*, and *U. perfoliata* and some late dog's-tooth violets.

My three days' botanizing (May 20, 21 and 22, 1885) have given me twenty-two species and two varieties of flowers, including nine kinds of violets, seven species and two varieties.

This, and three days of spring out-door life.

MASSACHUSETTS.

LOUISE DUDLEY.

ALONG THE WAY.

THE winter ways are bordered with the snows ;
The boughs above them lean,
Heavy with bloom the winter only knows —
The ice-sprays' silvery sheen.
Through them the suns of winter mornings shine,
To waken, with their rays,
The clustering, pendent blossoms crystalline
Along the country ways.

And summer paths are 'broidered rich and deep,
With generous, fragrant bloom,
The dusty roadsides for the flowers that creep,
And climb, and stray, have room.
Prim daisies, and pale, scentless violets,
Roses, the briars among,
Nature between the woods and meadows sets,
And quickens them with song.

And afterward the graceless thistles wait
Their change to ghostly wings,
And golden-rod, cheery, and brave, if late
Its free, fine treasure brings.
And maples flame along the forest path
And harvest-hoary fields ;
The meadow, with its scanty after-math,
Largess of beauty yields.

So we might border all our ways with grace
Of patience and heart's-ease ;
Our trust might bring into the darkest place
The calm, sweet glow of peace.
Along our ways, like flowers, might spring and bloom
Unselfish ministries ;
Did we but will it, time and strength and room
We all might have, for this.

OLIVE E. DANA.

KITTY'S HOUSEKEEPING.

PART II.

"TOM," began Kitty one morning, "do you like beef's liver."

"Yes, I'm quite fond of it," replied the unwary husband, recalling the rare occasions on which his mother, a model cook and housekeeper, had served up for his delectation a choice bit of delicately broiled liver.

"Then I think I will order some livers and make some liverwurst," announced Kitty.

"Liverwurst!" exclaimed Tom, "What is that? I fancy I should prefer the *best* liver."

"Oh, you stupid fellow!" laughed Kitty, "of course it is made of the best liver. Liverwurst is a Dutch dish, that mother used to make; she broiled the liver, then chopped it fine, seasoned it with salt, pepper and butter, then pressed it and cut it in slices when cold for breakfast or tea."

"That sounds beautifully, but do you suppose you can make it taste so?" asked Tom, in a tone that did not indicate entire confidence in his wife's skill.

"Of course I can, if I do as mother did; don't I cook everything nicely—except a few things that I have had bad luck with?"

"Ye-s," replied Tom.

"And to-day is the butcher's day," continued Kitty.

"And here he is," said a good-natured voice, while a good-natured face beamed upon her with country freedom through the open window at her side.

"Mercy me! Mr. Tucker, you have startled me out of my wits!" exclaimed Kitty.

"That's lucky for me," said Mr. Tucker, "for you won't be able to drive quite so sharp a bargain with me as usual. What will you have to-day?"

"If you think you are going to cheat me as well as

scare me you will find out your mistake before we part," retorted the merry housekeeper. "Have you any beef's liver to-day?"

"No, but I can bring you as many as you wish day after to-morrow; how many shall it be?"

"I don't know; how many did mother use to buy at a time?" replied Kitty, whose only conception of the size of livers was gained from her knowledge of the one found in a chicken which she had dressed a few days before!

"Well, it generally depended on the size of her family at the time. I shouldn't think you two could manage more than three or four," replied Mr. Tucker, scenting fun ahead; he had known Kitty all her life and was as fond of a joke as herself.

"I want to be sure and have enough," said Kitty, decidedly, "you may bring me six."

"I think you will find that more than you can take care of," ventured Mr. Tucker, but Kitty, seeing a twinkle in his eye which betokened mischief, would not be advised.

"You need not try any of your tricks on me, I shall require six beef's livers," she answered, sternly.

"All right, Mrs. Kitty, you shall have them, but don't blame me if there are too many," and the good-natured face dissolved into an immense grin as the village butcher went back to his cart.

On the appointed day Mr. Tucker was later than usual, but came at last with a big basket, which he placed on the kitchen table, saying; "Here's your liver; I'll take the basket when I come again; I'm in a hurry now," and vanished.

Kitty came into the kitchen and glanced into the basket, and then exclaimed:

"Goodness! who ever saw such a sight as this? Tom, Tom, do come here, quick!"

Tom came. Tom looked into the basket, where reposed six enormous beef's livers. Tom lay down on the kitchen floor and rolled over and over and laughed until the tears rolled down his cheeks, and his watch rolled out of his vest pocket, and his knife rolled out of his pants' pocket, and his slippers rolled off from his feet, and Tom himself would have rolled out into the garden if the kitchen door had been a little wider. But Kitty ran out to the street and wildly waved a kitchen towel above her head and called, "Mr. Tucker!" But no Mr. Tucker was in sight. Evidently he was in a hurry, Kitty learned afterward that he had served his other customers first and left her to the last, so that he might drive directly out of town.

"What will you do with them all, Kitty?" asked Tom, after they had quieted down and accepted the situation—and the livers!

"Boil them, of course," replied the undaunted house-keeper.

"Oh, my prophetic—stomach!" groaned Tom, "and in hot weather, too! We shall die if we eat so much liver."

"Nonsense, Tom, it's more likely we shall live forever, if there's anything in a name, or in quantity," said Kitty, cheerfully.

"I don't know as I shall care to survive them," murmured the discouraged Tom.

But Kitty went bravely to work and washed the livers, and put them on to boil in the big iron dinner pot, and the potato kettle, and the porcelain preserving kettle, and the granite saucepan and the big brass kettle and the little stew-pan.

"For pity's sake, Tom, don't let the neighbors get hold of this, or I never shall hear the last of it," Kitty had said, and for once the doors were closed and locked, for fear of unceremonious callers, and the curtains were drawn as if the family were absent.

Tom sawed wood and split wood and lugged wood into the house, and Kitty piled wood into the stove till the fire roared bravely and the big kettles and little kettles sent forth clouds of steam, and bubbled and hissed and sputtered in a most encouraging manner, and by night the livers were cooked.

The next morning Kitty impressed her long-suffering husband into her service, and he meekly submitted to be buttoned into one of her work aprons, and placed in a chair in the seclusion of the pantry to chop the liver. Tom chopped, and chopped, and chopped, until all the livers but one were chopped, and then he chopped through the chopping-bowl and through his pants, and narrowly escaped cutting his knee open. Then he asserted his manhood by tearing off Kitty's apron in a manner that sacrificed the buttons and buttonholes, and flinging the last liver far out from the pantry window, and savagely thrusting the pieces of the chopping bowl into the fire. Meanwhile, Kitty, having restored the chopped liver to the kettles, set herself to the work of seasoning. She seasoned and stirred and tasted, and tasted and stirred and seasoned, until the pepper was all used up and the

salt-box was empty, and the sage gave out and the savory was gone, and the butter tub had forgotten its contents.

"There isn't such an astonishing amount of it after all," remarked Kitty, briskly, "and it will be quite a treat to the neighbors, for, of course, I shall carry them in some."

Tom smiled with grim satisfaction, thinking of the sixth liver, which reposed harmlessly in the grass on the edge of the garden. Then he sighed thinking of the doom impending over the unsuspecting neighbors.

"What shall I put it into, Tom," queried Kitty.

"Into the cemetery," muttered Tom, but Kitty was not listening; she was taking an inventory of her rather scanty supply of dishes. She ladled the savory meat into an empty pickle jar, the bean pot, the oyster tureen, the pudding dishes and the bread bowl, and still the liver held out. Then she called into service a superannuated tea-pot and a cracked sugar-bowl and the vegetable dishes and the bowls and finally the coffee cups and tumblers, and at last the kettles were empty and washed up, and a worn and weary couple shut up the house at an early hour and went to bed.

"Tom, I think I will take a dish of liverwurst up to Mrs. Ryder," announced Kitty, the next morning, after the two had breakfasted on liverwurst and pronounced it very good.

"I shouldn't mind if you took two or three," replied Tom, thinking of the pantry shelves, on which were arrayed row upon row of dishes filled with that delectable article of food.

When Kitty reached Professor Ryder's she was greatly shocked to see a large bow of crape attached to the bell-knob. She had not heard that any member of the family was sick, and indeed had been in the house but two days before and knew they were all well then. How sudden it must have been, she thought, and with a heavy heart and tearful eyes Kitty went around to the side door and softly entered. There were Professor Ryder and Mrs. Ryder in the kitchen trying to comfort their two little daughters, who were down on their knees wailing loudly over the stiff body of a large, handsome Maltese cat, who had been a valued member of the family since his very kittenhood.

"What has happened?" asked Kitty, much relieved at seeing the whole family alive before her.

"Dear old Mouser is dead!" sobbed Mamie Ryder.

"And he's got to be buried," supplemented Ella, the younger, a child of ten years.

"The girls are heart-broken over it," explained Mrs. Ryder, "Mouser came in last night with a whole beef's liver that he found somewhere, and when we tried to get it away from him he carried it under the barn, and, whether he ate too much or whether it was poisoned, we don't know, but he went into convulsions this morning, and, while Professor Ryder was upstairs hunting for the revolver with which to put him out of his misery, he suddenly straightened out and died."

"Well!" exclaimed Kitty, "He couldn't have got any of our liver, for Tom chopped it all up for liverwurst, and I brought you a dish of it, thinking you might relish

it," and she placed upon the table a huge, yellow nappy, neatly covered with a napkin.

Another neighbor at this moment appeared, and at the same time the front door bell rang, and a carriage was seen driving into the yard, and there was quite a stir about the place, and then it was explained that the crape on the door was alarming the people.

"I know nothing about any crape on the door," exclaimed Mrs. Ryder.

"I put it there myself, mamma," announced Ella, "it's to show respect to dear Mouser; he's been in the family 'most as long as I have, you know."

Mrs. Ryder hastily dispatched the servant to remove the emblems of woe from the door, and herself met and explained things to the new arrivals, while Kitty slipped quietly away.

Kitty told Tom what a fright she had and was making merry over the affair when she was interrupted by an exclamation from him.

"Gracious heavens, Kitty! old Mouser must have got our sixth liver that I threw out of the window after the chopping-bowl broke!"

"And you never told me!" cried Kitty, reproachfully; "what can we do about it?"

"Hold our tongues about it," answered Tom, "I'm not responsible if a neighbor's cat comes into our garden and steals our liver and gorges himself into fits and dies."

"I don't suppose you could be hung for it," admitted Kitty, "but I do feel as if we were almost murderers, and as if we ought to be punished some way."

"We shall be punished enough before that liver is all gone," replied Tom, grimly.

"I think I will carry a dish of liverwurst to Mrs. Parsons," remarked Kitty, after she and Tom had dined on liverwurst.

"Do," replied Tom, "take a generous dish of it; I hate to see people stingy."

So the minister's family was supplied with liverwurst.

"Hadn't I better take some liverwurst to Mrs. Ellis?" asked Kitty, after she and Tom had supped on liverwurst.

"By all means," replied Tom, "what a generous nature you have, Kitty; how glad the neighbors must be that you are keeping house this summer."

And the Ellis family had some liverwurst.

For some days Kitty continued to flit about among her friends and neighbors, distributing her Dutch dainty, until Tom remarked that he was afraid the neighbors would give out before the liverwurst supply failed, while Kitty confessed that she was frightened lest she might forget and take some the second time to the same place.

But it never occurred to the misguided couple that the neighbors were comparing notes and getting their share of fun out of the affair, until Mr. Ellis called to Kitty one morning as he was passing and asked:

"See here, Kitty, have you any more of that liverwurst?"

"I guess it is not quite all gone," replied Kitty, "would you like some more?"

"Oh, no, thank you," he replied hastily, "but I am just going over to the Skinner district, and I thought if you hadn't sent any over there yet maybe you'd be glad of the chance. I'd just as lief take it along for you as not."

"We haven't any to spare for the Skinner district or any other district," replied Kitty with offended dignity, and quite regardless of the fact that she and Tom had that very morning been wondering what they could possibly do with what still remained.

"Where are you going this warm afternoon?" called Kitty a few hours later, from her hammock under the trees, to Mr. Parsons, who was walking down the street.

"I am going to see old Mrs. Green, who is sick. By the way, Kitty, perhaps you can tell me the cause of her illness. Has she been here to take tea lately, or have you been carrying her some of your delicacies," and Mr. Parsons ducked his head as if dodging an imaginary missile from Kitty's direction and hastened on.

"Did you hear that, Tom? Isn't it mean of him to talk so? I guess I shall not carry him any more of my good things," complained the young housekeeper.

"Good morning, Kitty; is this the day for the butcher to come round?" asked Mr. Goodwin, coming in unceremoniously one morning when Kitty was dusting the dining-room.

"Yes, it is," replied Kitty, rather curtly and looking on her neighbor with suspicious eyes.

"Well, now, that explains it!" exclaimed Mr. Goodwin, dropping into a chair with a sigh of relief; "just before I came in I saw nearly all the dogs in the village, with their tails between their legs and their heads down, scooting out of town as fast as they could run, as if some terrible calamity was after them. I see now they were afraid the butcher would bring some more liver to town."

"See here, Mr. Goodwin," said Kitty, "I have a whole bowlful of that liverwurst left, and if you don't take yourself out of my house instantly you shall eat every mouthful of it."

"Oh, my great-grandfathers!" cried Mr. Goodwin, making a rush for the door, "I'd sooner meet a Western cyclone than a dish of your liverwurst; it wouldn't knock a man over a mite quicker," and he was in the street in less than a minute, shaking with laughter, while Kitty, who had followed him to the door, called after him: "I will keep it for you till you call again."

"Aren't people hateful, Tom?" complained Kitty as she went back to her work. "Do you suppose that the neighbors all gave the liverwurst I carried to them to the dogs?"

"I wouldn't wonder if they did," returned Tom, dejectedly; "I wish we had owned a dog, or rather a dozen of them."

"Why, Tom, I thought you liked it!" exclaimed Kitty in dismay.

"So I did—a little of it, but one doesn't like to feel as if one were a whole hogshead filled with chopped liver. I know I'm about sick to-day; I have horrid pains and I believe it's all owing to that confounded liver," and Tom,

having relieved his mind, endeavored to relieve his body by doubling up on the lounge.

"I'm so sorry, Tom," faltered Kitty, "I've been in awful distress all the morning myself, but I was determined to keep up so you would not know it. Do you suppose we are going to die?"

"I don't much care whether we are or not," groaned Tom, desperately.

But Kitty, who had scarcely ever known a sick day in her life, was thoroughly frightened, and throwing herself down beside him, sobbed:

"What shall we do, Tom? Shall I call the neighbors?"

"Let the neighbors alone for once," snarled Tom, whose disposition seemed to be in sympathy with his body, as is usual to the male animal; "haven't you some Jamaica ginger or something that we can take?"

"Of course I have," said Kitty, more hopefully, "mother had all sorts of medicines in the house," and Kitty went to the pantry to rummage among the bottles on the top shelf. The Jamaica ginger bottle proved to be empty, but near it stood a two-ounce bottle, whose printed label announced the contents to be paregoric, and taking this, together with a glass and spoon, Kitty returned to her groaning and impatient spouse.

"Don't take on so, dear Tom," pleaded Kitty, "you scare me dreadfully. There isn't any ginger, but here's some paregoric. How much shall I give you, a tea-spoonful?"

"There's no use in such a baby dose as that for such a big ache as this; give me several spoonfuls," replied Tom.

So Kitty gave him a large dose, which he swallowed with a frightful grimace, saying, "I never tasted such villanous stuff; are you sure it's paregoric?"

"Yes, the bottle is labeled," replied Kitty, fixing a smaller dose for herself.

"I hope you haven't poisoned us," said Tom, doubtfully.

"There is no danger from paregoric; they give it to little babies. I was brought up on it myself, but mother knew how to fix it so it didn't taste like this," replied Kitty, who did not seem to relish her own dose.

Then Kitty brought a pillow and shawl from the bedroom and lay down on the floor beside the lounge as if there was comfort in being near Tom.

"How do you feel now, Tom," she asked after a while, when the groans and mutterings from the lounge had ceased.

"The pain is about gone, but I'm dreadfully sleepy," was the answer.

"It will do you good to sleep," said Kitty, but a few minutes later, when she was nearly asleep herself, she was roused by hearing Tom say in a harsh, unnatural tone:

"This—isn't sleep—it's—death—poison—call help!"

Kitty roused her wandering faculties enough to comprehend, and getting to her feet with some difficulty, went to the pantry screaming, "Help! help!"

The windows and doors were open as usual, but if

anyone heard no one heeded; noises were common where Kitty was.

Kitty knew that an emetic was in order, and in a few moments had prepared two tumblers full of warm water, salt and mustard. Tom seemed to have succumbed to a heavy sleep, but Kitty raised his head and put a tumbler to his lips, and succeeded in getting a little of the mixture into his mouth. The taste of the stuff and the effort to swallow aroused him, and he tried to put the tumbler aside, saying, "I can't—drink—that—it will—make me—sick to my—stomach."

Kitty laughed in spite of fright and stupor, and said with more animation:

"That is just what it ought to do, you great simpleton; down with it at once!"

And Tom obeyed, but sank down again in heavy slumber.

Again Kitty screamed for help, and feeling herself growing more stupid, lifted the other tumbler to her lips, but was already past holding it, and spilled it all over Tom as she sank senseless to the floor.

But her last cry for help had been heard, and Mrs. Parsons came in, just in time to witness the operation of Tom's emetic, and see him partially come to himself.

"What does this mean?" she cried.

"We're poisoned," said Tom, still speaking with difficulty, "give Kitty—an—emetic—quick!"

"You seem to have had a double dose," said Mrs. Parsons, laughing in spite of the seriousness of the situation, for Tom's suit of navy-blue flannel was deluged with mustard water. But she wasted no time; while she prepared another emetic she called one of her children and sent for the doctor. Then she lifted Kitty from the floor and carried her to the bed, and succeeded in administering the emetic, which proved a success, and by the time the doctor arrived Kitty was able to point out the bottle from which she had dosed herself and Tom.

"That is not paregoric, it is laudanum! how much did you take?" said the doctor.

Kitty told him.

"Well, if you had not been prompt with your emetic you would neither of you ever had any further occasion for medicine; you have had a pretty close shave as it is," and the doctor proceeded to give Mrs. Parsons directions for taking care of the unlucky couple.

A few days later, their vacation being over, two pale, cadaverous individuals were packing their trunks and taking a retrospective glance at the past two months.

"Tom," began Kitty, with great earnestness, "I hadn't any idea it was so dangerous to keep house."

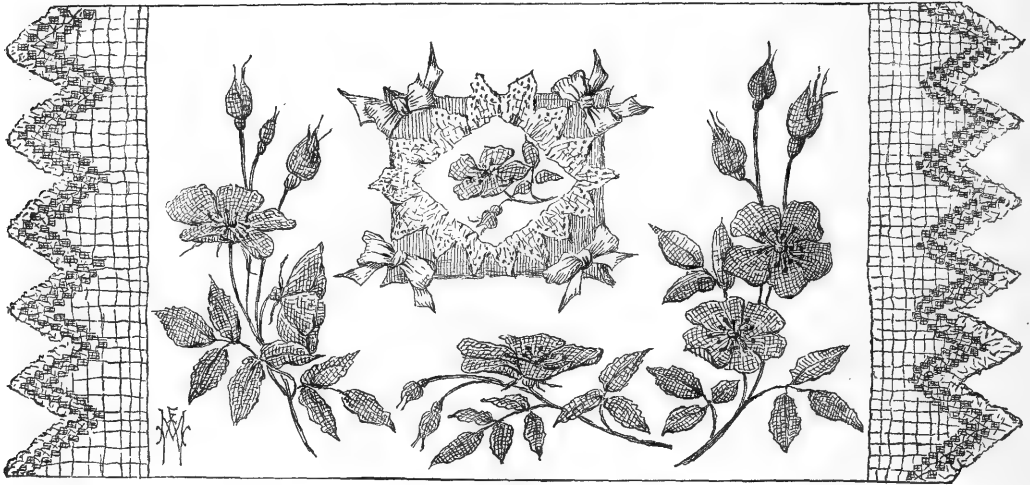
"Nor had I," agreed Tom; "I would sooner be a soldier and face muskets, bayonets, cannon, and all sorts of deadly missiles, than undertake to keep house again."

"I'm thankful that we have escaped with our lives," continued Kitty, "and that we haven't killed any of the neighbors, except Professor Ryder's cat."

And in this grateful frame of mind they returned to the city and to their boarding-place.

MRS. SUSIE A. BISBEE.

HOME DECORATIONS.



DESIGN FOR TOILET-SET.

A Toilet-Set in Darned Work.

A VERY pretty as well as durable toilet-set can be made of heavy linen, which is cut just wide enough to fit the top of the bureau, but sufficiently long to hang about a quarter of a yard over each end.

A design of wild roses, buds and foliage should be stamped or sketched upon each end, and across the front.

When embroidered, the flowers and leaves are filled in with solid darned work, which has a basket-work appearance.

Filling silk, or crewels, may be used, pink for the roses, yellow for the stamens, green for the leaves, and brown for the stems.

After darning the petals and leaves each one should be outlined with silk or crewel, using the outline stitch necessary for the purpose.

The stamens are represented by a single stitch for each with a knot-stitch at the end.

Each end of the linen cover is trimmed with the heavy crochet-lace, directions for which are given in Vol. XIII., No. 11, of the *CABINET*. This makes a very handsome trimming.

The pincushion, which should be large and square, is made of pink satin, with a large bow of pink satin ribbon on each corner.

The piece of linen which covers the top is only large enough for one rose and a leaf, and should be embroidered as already described. The piece is then trimmed with the lace, which is put on slightly full.

Any other shade of satin can be substituted for the pink, or different flowers may form the design if preferred, and with equally as pretty effect.

The work is not at all difficult, and its beauty when finished will fully repay one for the slight trouble.

M. E. WHITTEMORE.

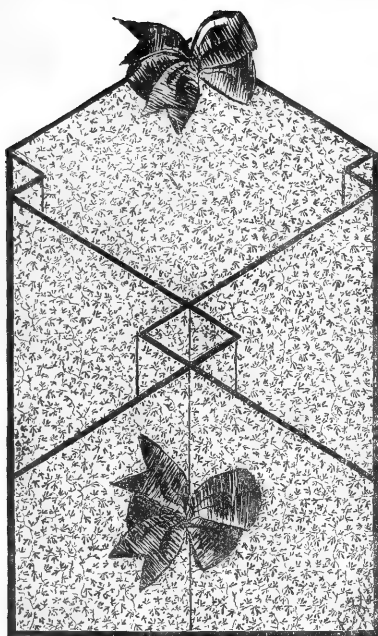


FAN CALENDAR.

A Fan Calendar.

FAN calendars are very pretty and convenient to hang beside the escritoire, or lay upon a library table, and are made as follows:

A small round paper Japanese fan is smoothly covered with satin of whatever shade one may wish. In order to make it stronger and give a little more body two pieces of stiff paper are cut the same shape, but a trifle larger than the fan; each is covered smoothly with satin



CRETONNE BAG.

and placed one on either side of the fan, the edges then overhanded together with sewing-silk of the same color.

The calendar is tied in the middle of the fan with a satin ribbon bow and designs of flowers, birds, landscape, or whatever is pleasing, painted on the satin margin which surrounds the calendar.

The handle should be gilded with gold paint and a bow of satin ribbon tied round it, by which it is to be hung; therefore, in placing the calendar on the fan, be careful to have the figures run from the handle down, otherwise they will be reversed.

Cretonne Bag.

THIS bag is intended to be hung on the inside of a closet door. It can be used for slippers, soiled clothes, or any purpose most needed. Select a pretty pattern of cretonne and cut a double piece of the goods fifty-two inches long and twenty-one inches wide. Fold this together in the middle, so that you have a piece that measures twenty-five inches and a half by twenty-one inches. Slope this from the middle to the sides within six inches of the bottom. These pieces are basted together back to back and bound on the sloping sides with braid.

It is then folded together to form the pockets. The larger pocket is twelve and a half inches wide; the cretonne is laid in a plait on each side of it, an inch and a half deep. It is then folded to the middle, where another

plait the same size is laid. It is folded once more to the side, where it is fastened underneath the plait. The parts that meet in the middle are overhanded together separately and the sides and bottom are bound with the braid. Three brass rings are sewed on the back to hang it up by, and a couple of bows of bright ribbon are fastened on it, as shown in the illustration.

E. S. WELCH.

Mikado Curtains.

THESE curtains may be entirely of home manufacture as far as the decoration is concerned, or cretonne, with fan designs, is made to do service.

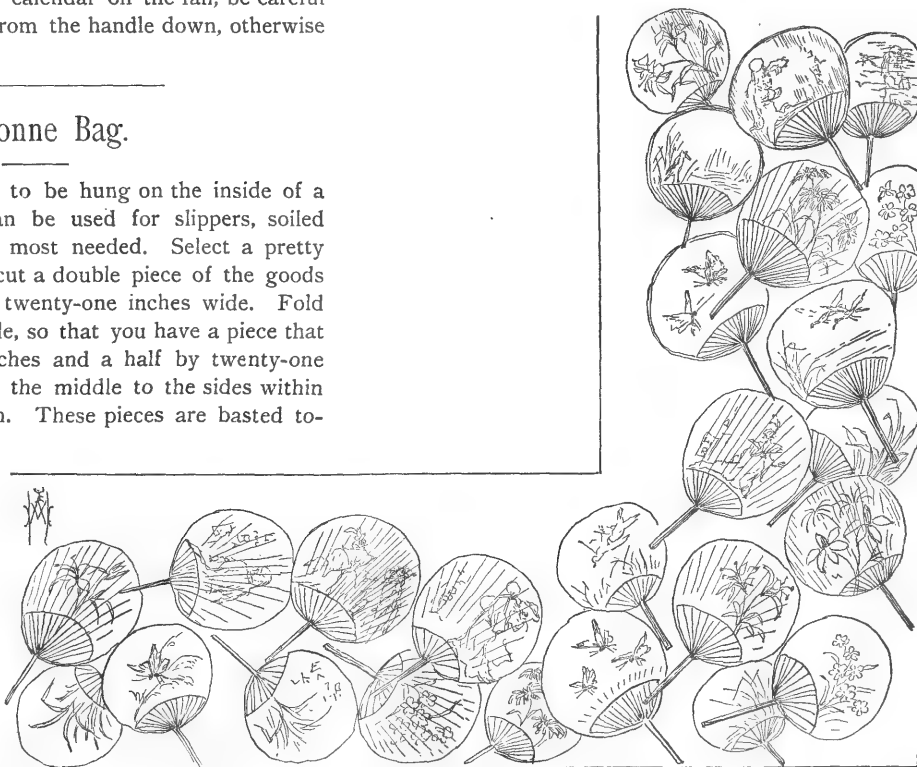
The prettiest and most durable fabric is Danish cloth, an inexpensive material of a cream-white shade, which serves as a pretty background for the gay colors which are used.

The cloth is twenty-three inches wide, and costs from twelve and a half to fifteen cents a yard. Two widths therefore will be required for each curtain to give it sufficient fullness. The length will, of course, depend upon the height of the window.

A hem about an inch and a half wide should finish the curtain on all sides.

They are now ready for the designs, which may be as gay in coloring and grotesque in form as one may please, but every design must be within the bounds of a Japanese fan, the fans placed in various positions to form a border down the sides and across the bottom.

They can be in appliqué if one pleases, cutting them from cretonne, or colored silk, or satin. If the latter is



DESIGN FOR CURTAIN BORDER.

used the designs are worked upon them with embroidery silks.

The prettiest and daintiest method, however, is simply to outline the fans with fast gay-colored crewels, and work the designs either with solid darning, also with crewels, or where a better effect can be obtained use only outline stitch. The brighter the colors and more elaborate the designs, of course the prettier the curtains.

It is very easy to find designs, and pretty ones, too, on many of the Japanese fans.

If it is displeasing to see the embroidery showing, as it does, in an unfinished manner on the wrong side of the material, the curtains can be lined either with the same fabric—Danish cloth—or with thin, inexpensive lining silk. In this case the hem is dispensed with, and the curtains lined after being embroidered.

They are hung with rings on rods, or poles, which is so pretty and popular a method of hanging drapery,

They also have this advantage, that when soiled they can be washed without injury, as the fabric or embroidery will not be marred by it.

It would be necessary to remove the lining, and have

it washed separately to prevent the edges being drawn in any way.

M. E. WHITEMORE.

Curtains for a Badly Lighted Room.

THE following advice is given by the *Art Amateur* to a correspondent who wants to know a cheap but effective way of curtaining the narrow and disproportionately high windows of a poorly lighted sitting-room: "Cut off from the upper part of the windows enough to make the height of the window proportionate to the width, and fill in the upper part with Japanese lattice-work, which can be bought very cheap at almost any of the Japanese stores. Below have a rather narrow brass pole, with the usual brass rings. From this suspend "Crete" curtains which are transparent, but heavier than the similar grenadine goods called "Madras." With a light buff or rich cream-color window-shade as a background for the lattice-work, as it will be if the shades are kept down a foot or two, you will retain more light in the room than you could secure by the use of any other kind of curtains and have an artistic effect at a small expense."

NEW YORK FASHIONS.

WASH dresses are simply made. The waists are either round, that is, they do not extend below the waist line, or else are gathered to a belt, the fullness continuing a few inches below it.

Surplice waists are very pretty and comfortable for the summer. By a surplice waist is meant a waist that is not cut out at all in the neck in front, but the shoulder is extended forward several inches and the front is straight all the way down. The extra fullness is gathered or pleated into the shoulder-seam near the neck, and opens in a V-shape, one side of the front folding over the other. Then, if this front is prettily trimmed its whole length, it forms a handsome neck and is very becoming to a good figure.

Another pretty style for a round waist is a yoke, the lower part of the waist being fastened to it by a tiny ruffle. This is particularly becoming to slight figures. The yoke may be both in the back and front, or the waist plain to the neck in the back and the yoke in front only; this is more becoming when a lady is inclined to round shoulders.

Waists are also very tastefully made, simply cut out in a square, back and front, and embroidery set in which gives a dressy appearance, and the sleeves should have a V-shaped piece of the embroidery inserted in the outside at the top. These waists are of course made without any lining.

The skirts to be worn with these waists should be made in two pieces; that is, upper and under skirt, or it will be impossible for a home laundress to successfully "get them up," as our English friends say.

The under skirt should be about two yards and a quarter wide, unless for a very stout woman, when it may be

two yards and half wide. Two gathered flounces, each seven inches wide, are prettier than one wide flounce, and the skirt should be trimmed alike all around.

Then, for the upper skirt or drapery, to my mind, there is nothing prettier than a rather short apron over skirt, drawn well up and far back on the sides, with a rather long and full back breadth. One width and a half of gingham is enough in the back. There must be two sets of tapes sewed to the side seams of this upper skirt to draw the fullness back properly, and give it the stylish appearance necessary. If embroidery be used to trim the waist it should be continued on the upper skirt, but not on the under skirt.

Another pretty drapery used on the same style of under skirt is a panel of side pleats on the left side, well stayed with tapes, and the drapery long on that side, but drawn up high on the right side, either by an arrangement of buttons and straps, or tapes, or else looped with ribbons and bows. Ribbons will be very extensively used during the summer, and the most stylish combinations of color seem odd and even startling at first. Scarlet ribbons on dark-blue dresses, cardinal on green, brown on écreu and olive green on pink.

Sashes will be a great feature with all dresses made with round waists. The soft surah and Bengaline silks adapt themselves so readily to the curves of the figure that they will be the favorites this year.

A few words about millinery. Hats and bonnets are all worn high; the trimmings are varied to suit the individual style, but the framework must be high. Let us hope that this style will not prevail another year, as it is not universally becoming.

MELUZINA.

HOUSEKEEPING.

Calves' Liver with Cream Sauce.

One pound and a half of calves' liver cut in slices half an inch thick and about two or three inches square. Let them lie in cold water for fifteen minutes to draw out the blood. Melt three tablespoonfuls of butter in a frying-pan, drain and wipe the pieces of liver, salt them and fry in the butter, being careful not to burn the butter and yet to brown the liver a little on both sides. Then remove the liver to a hot platter and fry a slice of onion and a sprig of parsley in the butter. Now stir in a tablespoonful of flour, let it cook until it is frothy and add one cup and a half of milk. Move the pan to a cool part of the range and stir the milk in slowly; let it boil up and strain over the meat. Serve with mashed potatoes.

Stewed Pie Plant.

Rhubarb, or pie-plant as it is often called, makes a very appetizing sauce for these spring days. Some physicians consider it a great blood-purifier and claim that every family should partake of it freely at this time of year. It is said to contain an agreeable mixture of citric and malic acids. To prepare it skin and cut it into inch lengths. Pour boiling water over it and let it stand fifteen minutes, or put cold water on it, set it over the fire and pour off this water when it reaches the boiling point, then put on fresh boiling water and add sufficient sugar to sweeten, and let it cook slowly. It is done as soon as it is soft.

To Bone Flounders.

It is not best to attempt boning a small flounder, as the fillets would be so small and thin as not to be worth the trouble. The larger the fish the finer the fillets. First, remove the head and tail, then, if you observe closely, you will perceive a line running down the middle of the fish on each side. This is the centre of the backbone. Begin at the head and, following this line, make a cut the entire length, letting the knife touch the bone all the way. Then, taking a small sharp knife, loosen the flesh from the bone, working from the cut at the backbone toward the fins or outer edge. By holding the knife flat and close to the bone there will be no waste. One quarter is now done; turn the fish around and do the second quarter in the same manner. Then turn the fish over and proceed as before, and the whole framework of bones is free; cut the fins off and any ragged portions that may be near the head, and you have four quarters of solid flesh. The next step is to skin them; take each fillet and, laying the skin side down on the board, hold it firmly in one hand, and, beginning at the tail, hold your knife as you would to scrape, keeping the edge of the knife close against the skin, but in such a manner as not to cut it; hold the knife firmly and pull the skin, and the flesh will roll up, leaving the skin perfectly free from flesh and not destroying the shape of the fillet. Egg and crumb them,

being careful that every portion is covered, and then lay them on a bed of cracker meal. Have ready a deep frying kettle of hot fat, hot enough to smoke, and do not attempt to fry but two fillets at once. Fry to a rich brown, and drain on brown paper. In boning any fish care should be taken not to touch the fish with the hands any more than is absolutely necessary, as it impairs the flavor, and it should be done in as cool a place as possible.

Boiled Potatoes Fried.

Pare the potatoes and boil them in the usual manner, not allowing them to become quite as thoroughly cooked as for mashed potatoes. When done drain off the water and dry them, then cut them in pieces about half the size of an egg and plunge them in a kettle of hot fat for one or two minutes, or until they are a delicate brown. The fat should not be quite as hot as for raw potatoes, but about the same temperature as for doughnuts. The potatoes must not be allowed to become cold before being browned in the hot fat. A frying-kettle is a great convenience, and those that are sold for frying potatoes will answer admirably for everything else by the addition of a wire croquette basket. Those are best that are made of wrought-iron and shaped like a large saucepan with long handle and high hook to hang the pail on. The pail is of perforated Russia iron, but will not answer for croquettes, as it sets flat on the bottom, while the wire baskets have low feet. Croquettes do not float like potatoes and would brown unevenly if they touched bottom. It is much less trouble, when they are fried enough, to simply raise the pail or basket and hang them up to drain, instead of fishing around in the hot fat for them and letting some get more cooked than others.

Meringued Eggs.

Separate the whites and yolks of as many eggs as you desire to use, putting the whites together in a bowl and each yolk in a separate dish, sauce plates or smooth round patty pans will be convenient; care must be taken in handling the eggs not to break the yolks. Beat the whites to a stiff froth and make as many heaps as you have yolks, laying them on a platter that will stand oven heat. Make a hollow in each heap and gently slip a yolk in each, then put the platter in the oven and let it remain till the eggs are hot enough not to taste raw. At table a pie knife will be more convenient to serve them with than a spoon. If you cannot heat them on a dish from which they are to be served, use granite-iron pie plates, rub them with butter and use a spatula to remove the eggs to the platter.

MRS. C. G. HERBERT.

WHEN carpets are well cleaned, sprinkle with salt and fold; when laid, strew with slightly moistened bran before sweeping. Soot falling on the carpet from open chimneys or carelessly-handled stove-pipes, if covered thickly with salt, can be brushed up without injury to the carpet.

NOTES AND COMMENTS.

William Bennett.—We regret to have to announce the death of this distinguished florist, which took place at his home on the 30th day of March, after an illness of only four days. Mr. Bennett was in many respects an extraordinary character; his love for flowers and for his profession was simply wonderful. So strong were his attachments for his plants that there was ever a conflict between his tastes and his business. Although a grower of plants for commercial purposes, when he had worked up some noble specimens, he had watered and fed them so much with his love that to part with them was like parting with near, dear friends—an impossibility. Consequently, he has left as an inheritance one of the choicest collections of plants to be found in this country. His houses were models of neatness, system and taste, contrasting strangely with those where flowers are grown solely for what they will bring in the market. We have known him long, and our relations were of an intimate character, and we cannot recall an instance when, in speaking of a plant, he did not look upon its beautiful rather than upon its commercial side. Of Mr. Bennett's early history we know nothing, other than that he came to this country as a common gardener, and has left behind him the reputation of being one of the best growers of beautiful and rare plants in this country, a man honored and respected by all who knew him.

* * *

The New York Horticultural Society has received new life, and we trust it may be enduring. We need a first-class horticultural society, and there is no reason why this should not be the one. The April exhibition was very rich in roses, orchids and rare plants. Our readers will have a rich treat in reading the description of the Klunder exhibition, which was in many respects a remarkable one. While it was gotten up on a grand scale, regardless of expense, and was, on the whole, an effective display, yet for taste of arrangement and for display of really beautiful flowers it did not compare with that of the New York Horticultural Society. In the first, the great mass of flowers, sadly too crowded, gave everything a "mussy" look. In the latter, the arrangements were such that the large hall was a perfect study of floral art. The flowers and plants were so arranged that they could be seen in their integrity, nothing hidden and nothing made to appear for more than its real worth. Roses were never shown to better advantage, and but few better ones were ever shown. The "Bennetts" from the Asmus nursery were simply perfection. "Her Majesty," as exhibited, did not meet popular expectation, and we did not expect it would; it has been puffed beyond reason, and for purposes of sale has been forced into plant and flower. Its friends have been its worst enemies, they should have taken more time to develop it—a year at least. Extreme size they have obtained, but substance,

color and constitution have been sacrificed. We believe it will yet be a grand rose, but it will never have the reputation to which it is entitled and would have had but for this undue haste. Like many other beauties it has been ruined by being thrust into society before character was thoroughly established.

We regret the unfavorable weather prevented a large attendance, but it did not prevent a good attendance, for there was a fair number present who came because they love flowers for their intrinsic worth, and not simply because the exhibition was under the patronage of Fifth and Madison avenues. If those who truly appreciate flowers can be assured of such exhibitions as have just closed, there need be no further fears as to the society's success and usefulness.

* * *

Plants in Tin Cans.—We have been told by those who are supposed to have authority to speak on all subjects pertaining to the welfare of plants, and in our turn have told others, that plants would not thrive in tin cans or in glazed pots. We have supposed this to be an undisputed fact, an axiom in floriculture. Again we have found out that it is the easiest thing in the world to be mistaken and the most natural thing to adhere to a false method when a true one would be much better.

Not long since we had occasion to call on a farmer and were ushered into the "sitting-room" to wait the coming of the man we wished to see. As the good lady had an impression that we knew something about plants, we were asked our opinion about hers—if some did not look pretty well, and why others did not flower; in fact, the questions came so thick and fast that we were perplexed to find answers, or rather to keep up with the queries, while the question of most interest to ourselves was: "How is it that plants in an ordinary sitting-room, heated with a coal stove, with but the light from three small windows, two on the east and one on the south, can make such luxuriant growth?" Certainly we have never, under the most favorable circumstances, seen more healthy, thrifty and well-grown geraniums, fuchsias and callas than were here to be seen. In fact, we did not know the varieties of some of them because of their luxuriant growth, and why should we when the leaves on a General Grant geranium were six inches in diameter, actual measurement.

"Happy Thought," a plant eighteen inches wide and not more in height, was so completely furnished with leaves, fully four inches in diameter, that not a stem of the plant was seen. All other plants were proportionately strong, which was something wonderful, and we were the ones to ask for information. After the surprise at seeing such charming plants had in a measure passed away, it returned when we noticed all were growing in fruit cans or tin pails. And greater still was our surprise when the lady told us that she had given up grow-

ing plants in pots, as she did not succeed in that way; and went on to say that the common flower-pot was so porous that the plants would get dry in spite of her attentions, and she was constantly watering, which she said was very injurious, as no plant would grow when half the time dry and half the time drowned. In tin cans the plants did not require watering but two or three times a week, and the earth was always moist without being muddy. We could not, neither did we want to, question her methods or reasoning, for it was evident that her treatment was absolutely perfect; here were geraniums that even John Thorpe, the foster-parent of the geranium, has never, in point of culture, equaled.

The cans in which these elegant plants were grown were by no means unsightly objects, as one might naturally suppose, for they were all neatly painted with vermilion and perfectly clean. The painting, of course, is a matter of taste; another color would have suited as well, but that has nothing to do with the fact that the old idea of glazed pots is absurd, and that old fruit-cans can be profitably employed in the window-garden. There are many things in favor of their use. They are lighter, more roomy, cannot be broken, and are inexpensive. They may, moreover, be decorated by modern methods, or by amateur artists, very beautifully and cheaply.

"But why don't my geraniums flower more freely," we were asked. Simply because they are growing so luxuriantly they could not flower, we replied; but wait until the cans are filled with roots, and then there will be flowers to correspond with the growth. We could say that in this case drainage was not neglected, and its importance fully understood. Holes were made in the bottoms of the cans and the usual amount of broken pots put in the bottom.

* * *

Oh, yes, *Popular Gardening*, we did call your attention to a small matter of fact, which you have seemingly overlooked. It was not where you got your geographical, but your other information, that we were a little curious about; it was so familiar to us that we supposed that both you and our correspondent, "F. Lance," must have been drinking at the same fountain. Had you? As for the matter of illustrations, numerically you may outnumber us, but size has something to do with quantity.

* * *

Improving a Flower-Bed.—Our correspondent, M. Crawford, writes us as follows: "I was once employed by a lady to improve a flower-bed that had been almost a total failure the year before, having been made where clay subsoil had been hauled in to fill up the yard. There was plenty of good stable manure on the premises and I covered the bed with it to the depth of three inches. This was thoroughly stirred with the soil for three or four inches, after which it was spaded deep enough to bring up a few inches of poor clay. The bed was again covered with manure as before and then stirred and spaded. This was repeated until there were eighteen inches of soil and manure so thoroughly mixed that it looked almost like potting soil. Everything planted on the bed made an astonishing growth. This was twelve years ago, and it shows no lack of fertility yet."

Cape Flowers.—William Heale, Esq., of the Cranston Seed Company, England, calls our attention to a supposed error of our correspondent, E. R. Taplin, in the nomenclature of plants, where the heath is called a Cape flower, a name properly belonging to a gnaphalium. This confusion arises from the use of local or popular names, with the usual results. In this country the ericas are popularly known as "Cape" flowers, as are many of our bulbs known as "Cape bulbs," because of their coming from the Cape of Good Hope. The gnaphalium to which Mr. Heale refers is but little known here under its popular name, although the dried flowers are sold in immense quantities by our dealers under the name of "Cape" flowers.

* * *

A Floral Association has recently been organized in Manitoba, with a sufficient membership to indicate that floriculture is a subject of considerable interest in this northern locality. The Lieutenant-Governor has been invited to be patron of the society and the following officers elected for the ensuing year: President, Mr. C. J. Brydges; first vice-president, Mrs. W. B. Scarth; vice-presidents, E. Clementi-Smith, Brandon; C. Tomlin, Portage la Prairie; T. Jasper, Emerson; secretary and treasurer, Mr. John Cape; auditors, Messrs. Robert Anderson, R. M. Heintz.

* * *

Rose Sunset.—This rose has, in a great measure, disappointed the growers of cut-flowers, so much so that they have discarded it. The reasons for this are various, and such that many another fair flower has had to accept; they are stated in two words—"Don't pay." It is certainly beautiful and distinct, but it came too soon after the *Sofrano* had been obliged to step down and out to make room for the *Mermet*, *Bennett*, and a host of other celebrities. Not so, however, in Europe; there it seems to be one of the best for winter flowers. They may possibly have caught our contagion and run wild after something bearing a foreign stamp. However, here is what a "Practical Rosarian" says of it in the *Gardener's Magazine*:

"For some time past I have been desirous of sending you a note on the comparatively new tea-scented rose, *Sunset*, and as I have half an hour to spare I do so now. I am anxious to make some reference to the rose because it is one of the very best of its class and color, and cannot be too generally known, more particularly among those who have to provide a regular supply of cut-flowers throughout the year. As those who take an interest in roses are aware, *Sunset* originated as a sport from *Perle des Jardin*, which is so generally acknowledged to be one of the best yellow roses in cultivation. The sport differs from the parent in having flowers of a rich apricot color, and is perhaps more free in blooming, as we certainly obtain more flowers from a given number of plants than from the same number of plants of *Perle des Jardin*. With me it has proved one of the best tea-scented roses we have for forcing, quite surpassing, as regards freedom of flowering, both *Niphetos* and *W. F. Bennett*, which also are favorites of mine. The plants, moreover, commence to flower much sooner after they are started in heat. We have a house devoted to

tea-roses, and from the plants of *Sunset*, which were placed in it late in the autumn, we have been cutting an abundance of flowers since the beginning of January, and from the appearance of the plants at the present time there will not be any scarcity for some time yet. The color very closely approaches that of *Mme. Falcot*, and the flowers, it may be added, are exceedingly beautiful, both when in the bud state and fully expanded."

* * *

Wild-Flowers.—The city editor of the *Los Angeles Herald* gives the following description of one of the charming beauties of South California: "The wild-flowers that cover hillside and plain justify California in laying claim to be the home of the goddess of the flowery kingdom. There are acres red as fire with the beautiful California poppy—the *eschscholtzia* of the botanists. Thousands of anemones cover the ground with the blue of heaven's own hue. The large cactus is now in bloom, bearing large, heavy racemes of white flowers. Some of the stems have a dozen flowers on them, each flower is about six to ten inches long, and the large ones measure perhaps six inches around at the largest end. The juniper bushes are also covered thick with blueberries, while along running watercourses and in other damp places lupines grow to a size and luxuriance that would astonish anyone not familiar with the flower in California. These plants of 'larkspur' grow to a height of two or three feet, and spread to a circumference of twice that extent. The racemes of royal purple flowers are often a foot long. Besides these there are thousands of others quite as strikingly beautiful."

* * *

The Trimardeau Pansies.—This distinct and beautiful class of pansies is listed among the novelties of the season. It is of French origin and the flowers, of extraordinary size and rich colors, are marked with three large blotches or spots. F. R. Pierson, Tarrytown, N. Y., strongly commends them.

* * *

A Correspondent at Crystal Springs, Miss., writes us as follows: "When the horticultural magazines come to us away down here in the South, with their interesting and instructive articles from Northern writers, oftener than otherwise we feel that they are just a month too late. When the days become balmy in March, and we feel that we wish to begin aright, and want the counsel of others, we wait anxiously for our monthly. If we are florists, of course we look for the *CABINET*. When it comes we find excellent hints as to what should be done *here* in January and February; but January and February are gone, and we, after expecting so much, only read what we should have done a month ago.

"Is it to be thus always? I know that there are a great many flower lovers in the South, and suppose some of them read the *CABINET*. Cannot some plan be adopted by which this excellent magazine may be made to go to Southern as well as Northern homes with seasonable hints and directions.

"The fact is there are two more months North than

South, viz., December and January. We write them on our calendar, but this is only to be loyal. Here, ordinarily, we have an October with forty-six days, a November with forty-six and a February with fifty-eight. However, sometimes in the season just past, say once in sixty years, when the mercury begins to register toward zero, we feel that it perfectly accords with the fitness of things to say that we know what January means.

"If the end suggested could be attained it seems to me that it would be a very interesting feature to Northern florists. When right in the middle of winter, so far from the pleasant warm days both in the past and future, it would be really *warming* to read about flowers and gardening in that sunny land "so near and yet so far." I've a mind just now to tell them, with this laudable object in view, how plants reared in cold frames are large enough for the garden, and how the lilies are lifting their flower-stalks high up toward the sun, and this very day, March 16, begonias, fuchsias and geraniums and a whole list of greenhouse plants are out facing the wind and weather, and never dream of being hurt, and this is the latest spring remembered by anybody."

* * *

A Rose Show.—Among the attractions announced for the rose exhibition held at the Jennings Avenue Greenhouses, Cleveland, Ohio, were the new roses *Her Majesty*, *The Bride*, *W. F. Bennett*, *American Beauty* and *Baroness Rothschild*.

* * *

Plants by Mail.—But few persons have the slightest idea of the extent of the trade in plants that are sent by mail exclusively. The number is simply enormous; one establishment which we recently visited has more than twenty hands busy at work putting up orders, and this house has only been in the plant trade a few years.

In looking over the catalogue of Chas. A. Reeser, Esq., Springfield, Ohio, we find that he was the originator of this branch of floricultural industry, having started the business at Pittsfield, Mass., in 1869. From a small beginning the business has reached gigantic proportions, and it must be a profitable one, judging from the richness of Mr. Reeser's catalogue.

Catalogues, &c., Received.

N. J. Herrick, Springfield, Mass. An illustrated catalogue of new and rare plants, bulbs and seeds, with offers on "collections."

D. M. Richard, St. Joseph, Mo. Annual catalogue of roses and bedding plants.

J. L. Dillon, Bloomsburg, Pa. Annual catalogue of flowers, plants and seeds. Roses a specialty.

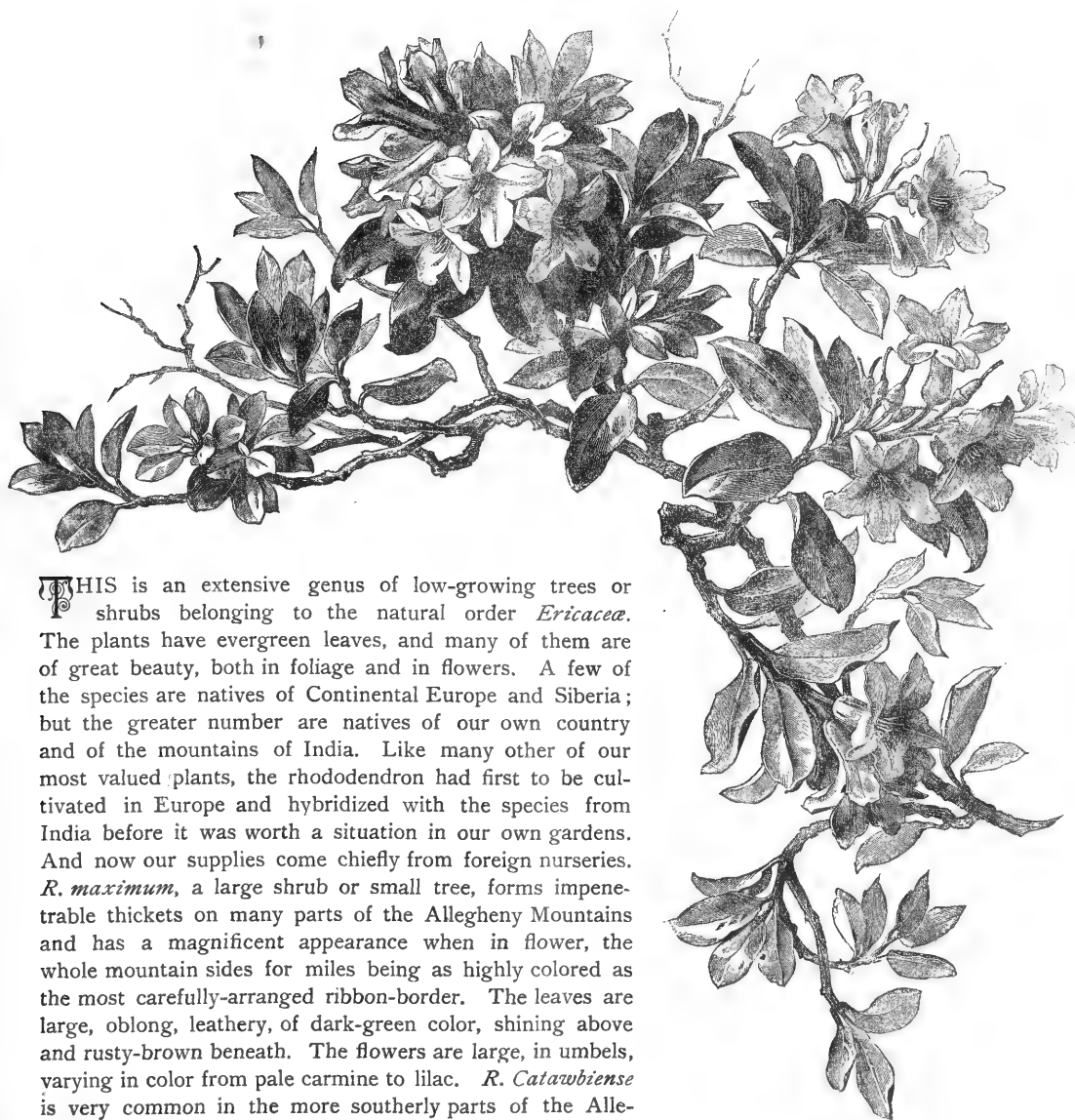
F. A. Dickson & Sons, Chester, England. A book of the farm. Catalogue of grass, grain and vegetable seeds.

Jacob W. Manning, Reading, Mass. Descriptive catalogue of fruit, ornamental and evergreen trees, hardy shrubs, and hardy herbaceous plants.

Webb & Sons, Wordsley, England. Catalogue of special manures for the farm and garden.

W. D. Lane, Middlebury, Vermont. Annual plant and seed list. Plants by mail a specialty.

THE RHODODENDRON.



THIS is an extensive genus of low-growing trees or shrubs belonging to the natural order *Ericaceæ*. The plants have evergreen leaves, and many of them are of great beauty, both in foliage and in flowers. A few of the species are natives of Continental Europe and Siberia; but the greater number are natives of our own country and of the mountains of India. Like many other of our most valued plants, the rhododendron had first to be cultivated in Europe and hybridized with the species from India before it was worth a situation in our own gardens. And now our supplies come chiefly from foreign nurseries. *R. maximum*, a large shrub or small tree, forms impenetrable thickets on many parts of the Allegheny Mountains and has a magnificent appearance when in flower, the whole mountain sides for miles being as highly colored as the most carefully-arranged ribbon-border. The leaves are large, oblong, leathery, of dark-green color, shining above and rusty-brown beneath. The flowers are large, in umbels, varying in color from pale carmine to lilac. *R. Catawbiense* is very common in the more southerly parts of the Alleghenies; its flowers are large and of a bright purple. This is one of the parents of most of our garden varieties.

RHODODENDRON FERRUGINEUM
(Rose of the Alps).

R. ferrugineum (Rose of the Alps), the subject of our illustration, grows wild in great abundance on the mountains of Switzerland, Austria, Savoy and Piedmont. It is found growing at the greatest elevation at which trees will vegetate on these Alpine ranges. It affords fuel for the shepherds and feed for the grouse and rabbits of these localities. It is a dwarf, compact shrub, from one to six feet high. Its leaves are the smallest of any of the genus and are covered with rusty scales on their under surface. The flowers are a bright, rosy red, less than

an inch in diameter, produced freely from May until July. There is less difficulty in keeping this beautiful little evergreen in health than the larger species of rhododendrons. It delights in a turfy loam, and should be planted on the northern side of tall shrubs where it may be shaded in summer, as it will not endure our hot sunshine. It should, moreover, have a moist situation; in such it will require no further protection and will make one of the most charming clumps of flowering shrubs that is possible for a dense shade.

NEVER TOO LATE.

WE, or rather our readers, are quite apt to think that because June is the month for roses, and our gardens are looking their best, it is too late to do anything more to make the garden beautiful. This is a sad mistake in many respects. In the first place, the flower-garden in June is more attractive in name than in reality. Although the rose is in its glory there is but little else, and the rose is not so important in June as in September. The annual or June roses are now second in importance to the ever-blooming China and tea roses and their hybrids. In June we have a grand feast for two or three weeks, then, in most gardens, we see insects innumerable and leafless plants, anything but objects of interest and delight. In autumn we have roses during months instead of weeks, and such roses as June can never boast. It is not, however, of the rose that we wish to speak, but of the garden in general, which now is more meagre than in the month that has passed.

There is no such thing as "too late" in the garden, for there is no time when plenty of work is not needful unless it be when the ground is frozen so hard that it cannot be worked. Plantings can be made at all seasons, and should be made in order to have the garden what it is capable of being—a joy to its possessor. Of course, we cannot plant now the things we should have planted last autumn and which should be in flower now, and it is yet too early to plant such bulbs as furnish exquisite flowers from March until May. We are apt to excuse neglect on the plea that it is either too early or too late to make a judicious start, when, in fact, the proper time for some things is *now*. Then why not improve the opportunity and make the most of the situation.

It is by no means too late to fill all vacant places with what are known as bedding plants, namely, geraniums, fuchsias, heliotropes, lantanas, and a score of other things which may be selected to suit the taste. In fact, the beauty of bedding plants is enhanced by late planting; more plants are ruined by being put out too early than from almost any other cause. Plants taken from the greenhouse where they have been living in a humid atmosphere cannot well stand the chilly winds of May and early June, while plants put out the first of July rarely fail to thrive most luxuriantly, and yield a profusion of flowers the remainder of the season.

But there are many of our readers that cannot indulge

in bedding plants because they are too far from any florist to obtain the plants in a satisfactory condition, even though they could afford the necessary expense; it is for that class we wish to speak, and to them we would say it is not too late to have your garden a success, even though that of your neighbor is in full bloom. There is yet plenty of time for a large number of annuals, a class of plants long neglected but lately restored to popular favor. Among these the double portulacca occupies a prominent position, and seed sown any time before the middle of this month will do nearly as well as though planted earlier. These plants do well on raised beds of light soil, in fact the more sandy the better. Their only requirement is heat and sunshine, and the more they get of that the better. They will grow anywhere excepting in the shade; there it is useless to grow them. When a bed is once started no further trouble will be required, as portulacca will reproduce itself. Keep the single flowers out as you would weeds, which is the only way to continue a bed of double flowering plants.

Balsams will come into flower just as quickly if the seed is sown by the middle of this month as if sown in May, and the plants will be much stronger, consequently more floriferous. These plants revel in light and heat, and should therefore have an open sunny position. Their succulent nature would indicate the necessity of an abundant supply of water, yet there are no plants that endure drought better. They seem to imbibe quite as freely from the atmosphere as from the earth. The camellia-flowered section is decidedly preferable for the border, as the colors usually come true from seed, and the flowers last much longer than those of other sorts. With a proper selection of colors a fine ribbon-border can be accurately arranged. Zinnias may be properly classed among the showy annuals that will succeed admirably if the seed is sown early in the month. Like the balsams, they are of a sub-tropical character, and will endure almost any amount of heat and sun, preferring an open position and a sandy soil, but objecting to shade.

Mignonette, without which the garden lacks refinement, can be sown now, and in succession until the first of August; give the plants plenty of room and keep the spikes cut, so the seed will not ripen, and a few plants will furnish flowers the whole season; but larger and finer sprays will be secured if they are not allowed to

branch, and when wanted for bouquets take the plant entire.

Pansies, the universal favorites, can be had in quantity in autumn, if the seed is sown any time this month. Although usually regarded as spring flowers, they bloom as freely and the flowers are equally as fine in the fall, if proper care is taken in the culture. They delight in a heavy soil and a cool, moist atmosphere, in a partially shaded position; they will not endure our summer sun. It is truly astonishing to see the improvement that selection has made in the pansy. But a few years ago there was no such thing as distinct colored pansies or very well defined markings in the flowers, and if by chance a flower of special merit was obtained, it was perpetuated by cuttings. Now many distinct colors are saved separately, and they have become so well established that plants of any desired color can be raised from seed as accurately as from cuttings.

Asters can be obtained from seed sown any time this month, and much better flowers will be secured than if the seed is sown earlier, as the plant is impatient of hot, dry weather, and is, moreover, liable during August to attacks from a black beetle that completely destroys the flower before it is fairly opened. Late plantings are free from this insect pest, and there are no flowers in the early autumn more useful than the aster for whatever purposes cut-flowers may be required, and for garden decoration they have but few superiors. Asters come so true from seed that beds, lines or masses may be arranged in any desired form or pattern with the most complete harmony of color.

We might add to this list many other valuable varieties suitable to the season, but we wish to say a word for a

class of plants now in perfection of bloom that is neglected more than any other class of flowering plants. We refer to the hardy carnations. No flowers are more beautiful, but they are seldom seen. And why? Simply because we get the impression that flower seeds are to be sown in the spring and then only. We make our gardens as we undertake some unpleasant task, put it off as long as we can and then finish as quickly as possible, giving it but little thought or care after the first planting is done. And yet our gardens, in spite of neglect, pay us larger dividends than can be obtained from any other industry that receives far more attention.

There is nothing in gardening more simple than the growing of carnations. The seed may be sown any time before the first of August, in any convenient spot where the ground can be got in as good condition as we would have it for early vegetables. Sow the seed thinly in rows at convenient distances to work readily. When the plants are two inches high transplant into beds where wanted to bloom. No further care or attention will be required other than to keep them clean until the ground is lightly frozen, then cover even with the tops of the plants with newly-fallen leaves, which can be kept in place with some brush. When gardening operations commence in spring rake away the leaves, fork up the earth between the rows and in June masses of the most beautiful and fragrant of flowers will be the reward of your industry. Florists' guides will insist upon a certain formula of soil and manipulation of treatment that will confuse a practical florist—the most impractical of all professors. But do not be discouraged; try the simple method we have given you, and the results will be as we have stated.

A NEW WAY TO MAKE A LAWN.

EVERYONE admires a piece of well-kept grass, whether it be a plot of a few yards or an extensive lawn. Although it grows nearly everywhere without any concern of ours, many persons have met with difficulty in getting it to grow where it is wanted. The seed may fail to grow by being buried too deep or too shallow, or in a soil that is deficient in available plant-food. Grass-seed has but little food stored up in itself, and unless there be a supply near where it germinates, the young plant must perish. In a damp time seed can hardly be sown too shallow, but if a drying wind follows the sprouting of the seed, all near the surface may be lost.

There is but little risk in putting down sod, but it is very expensive—much more so than people commonly think. It takes about two two-horse loads to cover a square rod, and I have occasionally known it to die in a dry time. In hiring ordinary laborers to cut sod it will be found that not one in ten do it well. One side will be thin and the other thick, and any amount of pounding when it is laid will not make a first-rate job. A skilled workman should be able to lay sod so that no seam may appear, but an inexperienced workman never does this.

The following method originated with myself about fifteen years ago, and it has some advantages possessed by no other; it needs no skilled labor, it costs but little, and it never fails.

After the ground is prepared as it should be for sowing the seed or for sodding, find the number of yards to be covered; then provide one-sixteenth as many yards of sod, cut it in pieces three inches square and place them a foot apart all over the ground. If in rows both ways, so much the better. Pound each one into the ground with the back of the spade. In a short time each piece will send up a bunch of green spears, and, later in the season, they will all run together. Every gardener knows how soon grass will encroach on a path or a flower-bed. If the pieces are in rows the spaces between may be kept clear of weeds with a wheel-hoe, or the whole may be cut with a lawn-mower.

M. CRAWFORD.

CUYAHOGA FALLS, Ohio.

[We adopted this plan as long or longer ago than our correspondent, although that does not detract from his discovery, and we, too, have found it the cheapest, quickest and best way to make a perfect lawn.—ED.]

VILLAGE GARDENS.

PERHAPS the most noticeable fault in the average village garden is a yearning for the unattainable, as the philosophers say. It is the attempt to produce the effect of a pleasure-ground on an extent only large enough to swing a kitten: to have numerous beds, ribbon-gardening and such like is worse than useless, it gives an air of pettiness to the whole. Ribbon-gardening and floral mosaics are a monstrosity at any time, but they are doubly objectionable in a small space. To have few beds, and these as large and simple in form as possible, seems always the wisest plan. It is a mistake to confine such a yard to flower-beds and gravel walks; have at least a strip of grass, be it ever so little. A yard, either front or back, always has its best effect when there is a central grass plot, either round or square, with the walk around it, and flower-beds about a yard wide next to the fence and under the windows. The central grass-plot may have one handsome foliage plant or shrub in the centre, or it may be without this ornament—beauty unadorned is adorned the most in a grass-plot as in everything else.

But here let us lift up an earnest and heartfelt protest against those flaming atrocities ycleped gipsy camp-kettles, not the unoffending article itself, for in its original form it is suggestive of all good cheer, but when painted a lively scarlet, slung in a rustic tripod, filled with long-suffering plants and stood on somebody's front lawn it is perfectly appalling. Not only in looks is this kettle unfit for such use, but its want of adequate drainage makes the soil sour and unwholesome. In regard to its drainage, we cannot object to a cardinal red butter-keg mounted on stilts as a garden ornament, but it is of very doubtful value as far as beauty is concerned.

Wherever paint is used about garden utensils a russet brown should be chosen; green paint never harmonizes with the surrounding greens, and a flagrant red should never be permitted.

So, if the presiding genius of a village garden wishes to ornament her grass-plot, she must give a wide berth to both gipsy-kettles and butter-kegs, and use for centre-piece some handsome sub-tropical plant.

Caladium esculentum is handsome in this position, or a tall growing canna will be found effective. The ricinus (castor-oil plant) is handsome and showy in spite of its unromantic associations. If permanence is desired a handsome shrub may fill this place, and here we have a wide range for our choice. One of the prettiest foliage shrubs we have seen is the purple-leaved plum, *Prunus Pissardii*. It is extremely attractive in growth, and its foliage, claret-colored in spring, deepens to purple later on without the disposition to revert to plain green so often found in shrubs of this class. It appears to bear our winters well, though I do not think it will mature fruit in the latitude of New York. Of course our old favorites among shrubs, the bridal-wreath, golden bell, double

almond, &c., need not be neglected, they are for the most part charming. Dwarf dogwood makes a pretty show in the spring-time, as does the dwarf Japanese horse-chestnut, the latter being extremely pretty in habit of growth. Then there is the old-fashioned calycanthus or scented shrub, and this is one of the things no well-regulated garden should be without. Among country people it is usually known simply as "shrub," without any more descriptive term.

It always seems wise to plant a country or suburban garden with an abundance of ornamental shrubs. They give a pleasurable air of permanence, apart from their own intrinsic beauty. But a large majority of our popular shrubs flower only in the spring, so we need make a different selection if we want flowers at midsummer.

A large rose-bed makes a never-failing source of beauty in the garden, and requires comparatively little care. The fine hybrids familiarly known as "June roses" are most effective, care being taken to select the hardier varieties. Our old favorite, the Jacqueminot, is always satisfactory, and the same may be said of the rich rose-pink Paul Neyron and snowy Mabel Morrison. In planting out hybrid roses we should never recommend *worked* or grafted stock; such plants never have the vigor or hardiness of those grown on their own roots. It has been our experience when the worked plants were completely killed during the coldest winters that plants on their own roots were killed only to the snow line.

For climbing roses, the old-fashioned Baltimore Belle and Queen of the Prairies may always be recommended; they are very profuse bloomers and are extremely hardy, they grow quite rapidly and in rose-time transform an ordinary, every-day porch into a most romantic bower. But if we want to make our village garden a distinctly gorgeous affair, we can do so with bulbs and annuals, at comparatively small expense. This is a desirable combination, for when our bulbs have ceased flowering the showy annuals come to the front.

Beds of bulbs should be planted in the autumn; some may be in rows six inches apart, others in clumps or masses. From the middle of April to the middle of May we should sow annuals between the rows of bulbs, which would most effectively remove the bald aspect of a bulb-bed in midsummer.

Of the bulbs, tulips, hyacinths and crocuses may be planted in rows; iris and narcissus in clumps. The latter improve most decidedly in strength and vigor if they are left undisturbed for years. The irises are for the most part extremely showy, especially the newer sorts. Among narcissi, the Pheasant Eye, or Poet's Narcissus, is doubtless the handsomest—its starry flowers are purity itself.

There is almost an infinite choice of annuals, ranging through all the reds and yellows conceivable. It is a good plan to buy mixed packets of seed; this gives the plant-

ing all the charm of uncertainty, as it is next to impossible to imagine what it may bring forth. Certain it is that the result is always an unexpected one.

Gaillardias and eschscholtzias are very attractive and extremely showy. So are many varieties of coreopsis. French and African marigolds are decidedly gorgeous, and give a quaint, old-fashioned look to the garden; but if they are allowed to seed freely, the next season they are apt to spring up in all sorts of unexpected places, until the mystified gardener is apt to think that whatever he plants, nothing ever germinates but French marigolds.

Annual and perennial phlox is another pretty thing, and a very gay bed may be made of various everlasting flowers. Some of the seedsmen put up a packet containing seed of twelve varieties of this class. The flowers are showy, and when dried are useful for the Makart bouquets now used in decorative art. For preservation the flowers

should be cut as soon as they are fully open, before they have time to become overblown. They should be tied in bunches and hung, with the flowers downward, in a shady place until they are fully dried.

Of all the annual climbers none is more interesting than the evening-glory, or moon-flower, a flower of the morning-glory tribe, which opens after sundown. It has large creamy-white, fragrant flowers, which are open by about eight P. M. This is one of the numerous examples of confused or incorrect naming of plants, for while one firm calls it *Ipomœa noctiflora* and another *I. noctiluca*, Paxton's Botanical Dictionary ignores both and describes it as *I. bona nox*. Seeds of this plant, received from the Botanic Garden at Bangalore, British India, were given under the latter name, which is undoubtedly the correct one. Our botanical, or rather horticultural nomenclature seems to stand in need of much revision; it is a decidedly confusing subject at present. E. L. TAPLIN.

EVERGREENS FOR SMALL PLACES.

WE frequently see small front-yards nearly filled with overgrown specimens of Norway spruce, or some other large-growing evergreen. The trees are so much crowded that all beauty is lost, and they obstruct the views from the windows and shut out the sunlight from the house. Grass cannot be made to grow under or in the shade of such trees, and the yard always looks untidy from the accumulation of leaves and twigs.

Now, we have numerous dwarf varieties of evergreens from which selections can be made that will be suited to the smallest yard, and will not only keep within reasonable bounds but will retain their beauty for years. In small ornamental grounds it is often desirable to cut off certain views, and for this purpose groups and masses of plants, as well as single specimens, are needed here and there. Then there are often ledges to be covered and hedges to be formed. In small places the work is done by the owner with such help as he can hire for a few days now and then, and in making a selection for the grounds the expense of keeping them in order must be considered. We have shrubs and small-growing trees in great variety that are suited for such places and that should be used to a certain extent, for we must have their flowers and summer foliage, but they are not ornamental in the winter, and they require much more care to make good specimens and keep in good shape than evergreens, and there is not so striking a variety in form and foliage.

Among the arbor-vitæ there are numerous dwarf varieties. The Little Gem does not grow above a foot or two in height and is a compact and round little plant with dense and dark-green foliage. The Woodward arbor-vitæ grows only about four feet high in ten or fifteen years, has a very clear and bright shade of green, and never requires trimming; it keeps its natural oval form perfectly.

The Globose arbor-vitæ grows about three feet high and equally as broad; it has rather a loose foliage. These

arbor-vitæ are well suited for the outside row of a group of evergreens, and are especially desirable for a low division hedge. In some places it is a practice to do away with the unornamental line fences and throw the grounds together; this adds greatly to both places, and where it is adopted the whole length of a street, it gives a very pleasing effect.

In such cases it is often desirable to mark the division of the grounds with some ornamental hedge that will not be high enough to obstruct the view from one ground to the other. These dwarf arbor-vitæ are unexcelled for this purpose, for they will make a hedge that will not grow so high as to obstruct the view, and they will require no pruning, as the growth is so uniform and compact, yet perfectly natural, that the stiff, unnatural outline of a close-trimmed hedge is greatly improved upon.

Two other dwarf arbor-vitæ, the Heath-leaved and Tom Thumb, are desirable for ornamental grounds. The Heath-leaved is a very charming little plant, with fine foliage in dense tufts; the whole plant has a rounded form, with irregular curves here and there, and a soft shade of green turning a pretty reddish purple in winter, very different from the yellowish brown of most arbor-vitæ.

The Tom Thumb, also, has a fine heath-like foliage, which is not so dense as the last, and is of a lighter shade of green. It is also a very pretty plant, but is liable to revert to the usual arbor-vitæ foliage. Probably few have noticed that arbor-vitæ seedlings, a year or two old, have a different foliage from the older trees. They have the same or similar character to the heath-leaved and Tom Thumb varieties, and it may be seen that it is not so strange that they should vary to such apparently unnatural forms of foliage.

Among the spruces there are also very dwarf forms, such as the varieties of the Norway spruce, *A. pygmyea*, *A. Gregoriana*, *A. Clanbrasiliana* and a dwarf variety of the black spruce *A. nigra pumila*.

The pygmy spruce grows only a foot high and a little more than a foot in breadth, and the variety of the black spruce a little larger; the Gregory spruce and Clanbrasil's spruce three to five feet high and about as broad, but the last named often is wider than it is high. All these varieties have dense masses of very short branches that form a low shrub of irregular outline.

There is also a dwarf silver fir of quite regular oblate form, but the finest dwarf fir balsam is a variety from the region of Hudson's Bay; it does not grow over four feet high and has a rich, velvety green, very dense foliage; the outline is quite irregular and it forms a very pleasing and picturesque ornament on the lawn.

A golden, creeping juniper has been recently introduced that is one of the brightest and best colored evergreens we have; it is perfectly hardy and is just the thing for covering a ledge or pile of rocks, or for a golden yellow bed in a lawn. The plant turns a purplish tinge in the winter that is quite attractive.

The type, although a common native, is by no means unornamental, for it will make a fine bed of green in the lawn. I well remember such a bed at the home of the late A. J. Downing, that was one of the most attractive features in the grounds, and there is nothing better for covering a ledge or pile of rocks with a permanent green; it will grow in the most barren soils and spread in all directions close to the surface, and makes a dense mat of foliage.

There are several of the Japan cypresses (*Retinosporas*) that are quite dwarf. The *Retinospora filiformis pendula* makes an oval tree with the tips of the branches long, slender and drooping gracefully. The branches are often in layers, one above another, giving the tree something the appearance of a fountain in living green. It has a pleasing, yellowish green shade. Another, *Retinospora obtusa nana*, is pyramidal and a dark, rich shade of green with a peculiar twisted arrangement of the growths that attracts attention and marks it as one of the most beautiful evergreens.

There is also a dwarf white pine not growing over four or five feet high, that has the beautiful glaucous green of the common white pine, and is a desirable tree for the lawn, especially among other evergreens, as its light-colored foliage makes a pleasing contrast to the dark forms.

There are many trees of a size larger than those already named that are suited for the centre of a low-growing group, or against the background of larger trees with the dwarf varieties in front, and among the most conspicuous and unique are the weeping forms of the Norway spruce and European silver fir. Their branches fall directly downward with a graceful curve; they take up very little room in a lawn and grow from fifteen to twenty feet high.

The spruce has a vigorous growth and brighter green foliage than the type; the fir has the beautiful glossy green of the type, and is equally as attractive in form as the spruce.

In marked contrast to these are the conical and pyramidal varieties of the spruce.

The conical spruce, *Abies excelsa conica*, is a slow-

growing compact tree of very regular conical outline. The pyramidal spruce is a tall and narrow variety, taking up little room in the lawn and making a conspicuous tree for a background, but rather too stiff and formal for the centre of a bed.

The Irish juniper, *Juniperas Hibernica*, is greatly admired by many for its very slender columnar form and bright green foliage, but unfortunately it cannot be depended upon for hardiness in the latitude of Boston.

The Swedish juniper is of a similar habit, but more hardy.

The arbor-vitæ are all suited to a small place, as they occupy but little ground, and among the varieties between the dwarf ones named and the larger growing types, the Siberian is one of the most desirable. It has a darker green and more dense growth than the type, and does not turn so brown in the winter.

Among the numerous golden varieties the George Peabody is the best. It has a bright golden-yellow color, and retains it throughout the season. Another, the Cloth of Gold, is very pretty, and not so formal in outline.

The Douglas Golden has a darker shade of yellow in the spring, but does not retain its color so well throughout the season.

The Queen Victoria is a silver-tipped arbor-vitæ, and one of the best of its kind; the branches are distinctly tipped with white and the tree is quite conspicuous.

Parson's Compacta is very regular in outline and as symmetrical as though trimmed. It has a globular form, and sometimes grows ten to fifteen feet high.

The dwarf pines, *Pinus pumila* and *mughus*, are very pretty trees for the lawn. They are a dark shade of green and hold their color well through the season. They make round and compact little trees, perfectly hardy, even on the sea-shore, where so few evergreens will survive.

There are among the retinosporas several small-sized trees of great beauty, and one of the finest in form and color is *Retinosporas squarrosa*. It has a very pretty irregular outline, with a straight trunk and conical form, but the young branches push out in feathery sprays from the foliage of the previous season and droop gracefully at the tips. The whole tree is of a soft bluish-gray color, very delicate and charming. It must be seen to be appreciated.

Retinosporas plumosa has a dark-green foliage; the tree is conical, the branches are in loose flat sprays and the foliage very fine and delicate.

A golden variety of this is very bright yellow and holds its color throughout the season, the branches are in more compact tufts than the type and it makes a more nearly round and a more closely-formed tree.

All the retinosporas require trimming to keep the outer foliage close and dense, for the dried and brown old leaves are retained, and if the surface is open they show to a great disadvantage.

I have named such trees as are hardy and well tested, and have given a sufficient variety for any proprietor of a small place to select from.

In arranging the trees in the grounds the groups and

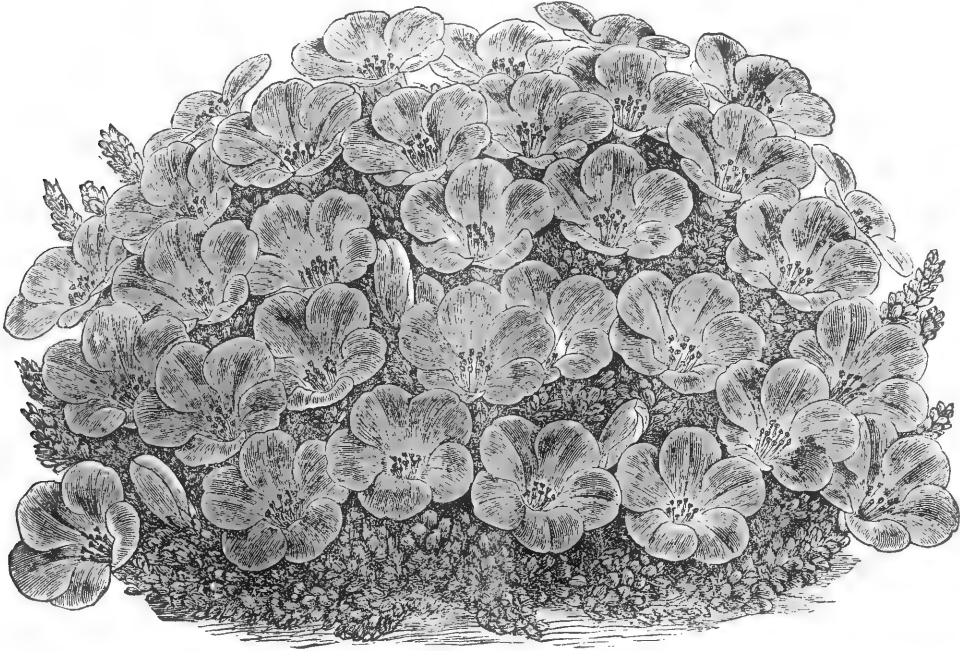
single trees should be placed on the edge of the lawn, not in the centre, for an open and unbroken stretch of grass is one of the objects always to be desired. The trees should mark the outline of the lawn; the larger trees and plants should be placed in the background and the smaller ones in front. Room should be given each tree to develop, for one good and perfect specimen of an evergreen is more pleasing than a dozen poor ones. The

trees may be planted thick at first with the object of moving them in two or three years.

In the arrangement formal figures and outlines should be avoided as much as possible, and bays and projections should be made here and there; this will allow positions for new acquisitions that will be added now and then.

WARREN H. MANNING.

READING, Mass.



SAXIFRAGA OPPOSITIFOLIA.

THE SAXIFRAGA.

PLANTS naturally adapted to the rockery are by no means common, or at least not generally known, and to plant in any position subjects unfitted for the place spoils an effect that was designed to be produced. The genus *Saxifraga*, which is a very extensive one, numbering more than one hundred and fifty species, abounds in hardy perennials admirably adapted to rockwork or any rough border where it is difficult to make most plants grow. Nearly all the species are tenacious of life, and seem fond of making a home under adverse circumstances. In city gardens, where nearly all plants grow under protest, the *S. umbrosa* is perfectly at home, and will thrive in spite of smoke and soot, and in the most shaded parts of the garden. *S. sarmentosa*, creeping saxifrage, popularly known as beefsteak plant, and strawberry geranium, is a native of China, and one of the best plants for hanging-baskets or other rustic designs, growing most luxuriantly either in sun or shade.

S. oppositifolia, the purple saxifrage, is the subject of our illustration. It is an Alpine species, of which too much cannot be said. Its flowers are of a deep pink, or flesh-color, running into deep, purplish crimson, and are

produced freely in early spring. It should be planted in a rough; moist and partially-shaded situation. The shaded rockery is its favorite spot, and there it will thrive luxuriantly and become an object of beauty the entire season.

S. crassifolia is a well-known species, with large, broad, fleshy leaves. Its flowers are produced in dense, panicle clusters, rising from the terminal shoots in showy, pendant masses; they are of a light, rosy color, with the slightest lilac tint, and are produced in May. Of this, like most of the species, there is a vast number of varieties, any one of which is sufficient for an ordinary collection.

We cannot attempt a description of all the species, and regret that they are not more commonly found in this country. As yet, growers of hardy, herbaceous perennials have met with but little encouragement in making a collection of this class of plants, sales not warranting the expense of making a complete collection. We trust the day is not far distant when hardy plants will be appreciated according to their worth.

ORNAMENTAL FOLIAGE PLANTS.

BEING very partial to plants which have rare beauty of foliage, I send every year to Mr. John Saul, of Washington, for a few of this class, and as they have recently arrived I take them for my subject.

Anthericum picturatum is very handsome with its long, drooping foliage, having a creamy white band running through the centre of each leaf, margined on each side with rich deep green. It is of quite recent introduction from the Cape of Good Hope. It is of a hardy nature, not affected by the dry atmosphere and gases of our winter-heated rooms, and is admirably adapted for a hanging-basket or a window-bracket. The buds, or short shoots, formed on the flower stems, put in as cuttings, root readily. It is also propagated by seeds or division of the roots. *A. liliastrum* is a half-hardy, herbaceous plant, which bears large, pure white fragrant flowers, marked on each segment with a green dot. It is commonly called St. Bruno's lily.

Crotons are among the finest decorative plants known. Some have long narrow leaves, gracefully arching; others, broad and short; some are recurved, others twisted; but all are more or less veined, striped, or mottled with shades of yellow and crimson. *C. aurea maculatus*—has small ovate leaves of a deep green, profusely spotted with yellow. *C. nobilis* has long, pendulous leaves, richly colored with crimson, yellow and green; the former is most prominent on the stem, leaves, stalks and mid-rib, where it is banded with yellow. *C. Queen Victoria* is of a rich golden yellow, mottled with green; the midrib and primary veins are of a rich magenta color, changing to vivid crimson. *C. variabilis* has long leaves marbled and blotched with different shades of yellow, orange and crimson. The leaves are very variable, both in color and

shape, some being straight, others recurved and often distorted. *C. Stewartii* is a broad-leaved variety, dwarf and bushy; the foliage is dark green, irregularly banded and margined with rich orange.

The word croton is from *kroton*, a tick, in reference to the resemblance of the seeds. The plants require a high temperature and full sunlight to develop their markings, and are best grown in small pots. They are not only highly ornamental but useful. *C. tiglium* furnishes the croton oil. *C. tinctorum* is used to dye an elegant blue. *C. eleuteria* furnishes cascarilla bark which has a pleasant spicy odor and a bitter aromatic taste; it is considered a valuable medicine.

Sanchezia nobilis variegata is a beautiful evergreen shrub from Bolivia. The leaves are large, oblong, deep green and broadly striped with golden yellow. The flowers are yellow, with crimson bracts.

Dieffenbachias are very showy, ornamental plants, named for Dr. Dieffenbach, a German botanist. They are natives of tropical America and the West Indies, and hence require warmth and sunshine. *D. Bausei* is a compact, broad-leaved variety; its yellowish green leaves are blotched with dark green and spotted with white. *D. Weirii*, one of the finest, is dwarf with foliage of bright green, thickly blotched and spotted with pale yellow. *D. picta*, deep green, mottled with white. The juice of these plants, like the oleander, is poisonous. It is said that Humboldt, when gathering one of these plants, unfortunately tasted it and in consequence lost his speech for several days. It was *D. seguina picta*, called by the natives the "dumb cane," because it possesses this power of paralyzing the speech.

MRS. M. D. WELLCOME.

TYPE-WRITERS.

Sphagnum & Co., Florists, Alaska:

GENTLEMEN—I received the copies of the *American Florist* that you so kindly sent me. Thanks. You remark in a cynical way that it has said of me that I "would make a good Lord High Executioner." I accept that as unbiased testimony to my worth, and as a striking proof of the faultless penetration of the *American Florist*; in fact, I am proud of it. On the other hand, I think it told *you* in the same breath to "be very careful." That is sound advice, and I will venture to say that you will lose nothing by following it strictly; that is nothing of any value—not even your heads.

But to go back to the *American Florist*. It is a journal of which the floricultural fraternity may well feel proud. It is alert and full of exuberant vim, and, for such a youthful periodical, displays an amount of tact, ability and stirring enterprise that many maturer journals

might copy to great advantage. Its articles are in the main cool (except those on the heating question), concise, and full of point, and its views are given without any distressing circumlocution. The field it occupies is vast and is constantly expanding, hence the future before it is bright and full of promise; may it then, like Mr. Thorpe's chrysanthemums, go on from year to year, ever progressing, until each in its respective sphere shall have attained the utmost limit of perfection. You have, in calling my attention to this bright little sheet, conferred a favor, but my gratitude for the benefit is all but annulled by your curt and stinging postscript. Truly I may say of your letter that "*tout le venin est dans la queue*." This postscript, with a marked lack of courtesy, rudely tells me that my "very pronounced aversion to type-writers is puerile in the extreme and quite unworthy of serious consideration." I feel your reproach keenly, having

always prided myself on possessing gravity of the most dignified and even serious character. Aldrich, a pure, sweet and genuine poet, has said :

"Time, that blunts the edge of things,
Dries our tears, or spoils our bliss ;
Time will bring such balm to me
That I can bear to speak of this,"

or words to that effect. I quote from memory. Time might, indeed, have obliterated the remembrance of your injurious addenda, had you not, with refined cruelty, volunteered the appalling prediction, that the use of the type-writer was destined in the near future to become universal. This gratuitous and uncalled for assertion reveals on your part a depth of malice which renders you a dangerous adversary, though I must admit that at the same time it presents a cheering outlook for the barbarous manufacturers of the horrid machine. But firm and unswerving loyalty to my convictions forbids that I should rejoice thereat ; hence, as a matter of fact, your most unfeeling prophecy depresses without in the least converting me to adopt your exaggerated estimate of these objects.

On the contrary, I firmly believe that an indiscriminate use of these uncanny instruments is fraught with danger, not only to isolated individuals, but to the entire fabric of society, and that it is destined to be the cause of social upheavals far surpassing in magnitude any which have been the result of the agitation of the labor question. I am fully aware that in advancing such a startling theory it is incumbent on me to support it by lucid and irrefragable proofs ; therefore, with your permission, I shall adduce a few arguments of a gravity and force so sweepingly irresistible that they cannot possibly fail to carry full conviction to any unprejudiced mind. You will pardon me if they should take a somewhat personal form, for I hope to reach your reason through the channel of your natural affections.

You can doubtless readily recall that on a certain occasion the venerable and widely-experienced Mr. Punch gave sage, though laconic advice to a person contemplating matrimony. The simple "Don't" was more significant and expressive than would have been a voluminous treatise on the same subject. Yet I am told that, in defiance of such competent authority, the junior member of your firm has signified his intention to take this grave step. If such be the case, let me beseech the impetuous young man, as he values his future happiness, to refrain from proposing to the young lady through the medium of your official type-writer, for I fear such an inconsiderate course would infallibly blast his fondest hopes. Let him pause and ponder deeply ere taking this fatal step. Dreadful doubts and torturing scruples would surely assail her, and in the agony of the mental confusion, caused by the reception of a proposal couched in such an extraordinary form, she would become suspicious and mistrustful to such an intense degree that she might, and probably would, all at once, insanely fancy that while the machine made the promises the young man would not be, from a legal point of view, strictly bound to carry them out, and that this hitherto unheard of innovation on the

traditional etiquette of courtship was an artful trick to pave the way for a future divorce. This harrowing thought would then plunge the young lady into the deepest mental agony for several days, and finally her cogitations would become so inextricably complex and confused that her brain would very likely give way and she would become a raving maniac, hopelessly possessed with the fixed idea that she had given a sacred and solemn promise to marry the machine. At this sad stage she would obviously be a complete mental wreck, and as the physicians could no longer hold out hopes of her recovery the only alternative would be to send this innocent and lovely young lady to a lunatic asylum. As a matter of course, young Mr. Sphagnum would immediately go into a decline and have to be sent to Florida. There the Southern doctor would, the very first thing, order this delicate young man to bathe in the St. John's River, and he, being feeble, helpless and unable to defend himself, might quite naturally be instantly swallowed by some vagrant alligator, and if his boots (and other apparel) should be gathered from the beach and forwarded to you by express, then, as you sadly paid the charges on the same, you would, no doubt, bitterly deplore having turned a deaf ear to the timely warnings I had given you with so much zeal and disinterestedness. And to say that although the primal cause of this touching idyl, this heart-rending episode, and, the sad circumstances fully warrant me in adding, this tragic tragedy could be distinctly traced to the guilty type-writer, yet how many shallow, giddy, thoughtless mortals go on day after day employing these machines heedless and apparently serenely unconscious of the many possible catastrophes compressed within the rickety bodies of these fateful, planchette-like objects. What a withering commentary of the boasted enlightenment and foresight of this bombastic nineteenth century !

But supposing, for the sake of argument, that the young lady shouldn't, after all, have really gone mad, then another aspect presents itself equally destructive to young Mr. Sphagnum's future happiness. A missive so very *bizarre* and glaringly unconventional could not fail to carry on the face of it the dreadful suggestion that a thousand copies had treacherously been struck off, and promiscuously distributed to all the eligible young ladies in town. This pessimist view of the case would at once fill her with burning indignation, complicated with the most furious jealousy and lead to mutual and violent recriminations, all ending in breaking off this most advantageous (for Mr. Sphagnum) match. If the young lady owned a large amount of property in her own right, this unfortunate dénouement would naturally and painfully wound young Mr. Sphagnum in his most sacred affections ; and, if he shouldn't actually die of a broken heart, this cruel shock to tenderest feelings would unfit him for active business for an indefinite space of time, and he might in the stupor of his grief, unless he were well watched, send out Her Majesty and other expensive novelties in response to demands for Early Rose potatoes. Still another disastrous contingency would inevitably arise should the foregoing phases of this important question luckily fail to manifest themselves. A love-letter so grotesque and utterly incongruous would present count-

less vicious features, a few of the least reprehensible being its lawless and erratic orthography, aimless and maudlin punctuation, its tortuous lines of wabbling sinuosity, which, with its general appearance of stilted formality, would exasperate the most amiable young lady in existence, and fatally extinguish any amount of budding affection. The upshot of such a futile attempt to gain her hand would be that this wealthy and highly-accomplished young lady would begin to violently hate the promising junior member, and would doubtless elope with his hated rival through sheer disgust. This would be another cruel and terrible shock, and if a dangerous brain fever did not follow, he would, at least, be in such a dazed condition that you could not possibly trust him to label the roses for months, unless you purposely desired to have the hybrid remontants adorned with the names of the ever-blooming sorts.

The formidable train of evils which would be the consequence of a single type-written letter should certainly warn you of the imminent and positive dangers which follow even a limited indulgence in its use, and when I have so clearly and logically demonstrated the blighting effects in an individual case, judge then the gigantic evil of the aggregate ravages on society in general.

Since commencing this letter, a magazine for the present month, having an immense circulation, has been handed me, and to my intense dismay I behold on the inside page of the cover the announcement of a type-writer for five dollars, which I dare say is but the prelude to a ten-cent instrument a few months hence. I look upon this as an insidious snare set for the American youth, and consider it a materialized emissary from unmentionable regions, sent to consummate and crown the work of moral desolation so vigorously inaugurated by the dime novel, and not too unsuccessfully continued by the notorious toy pistol. Having studied the type-writing question from every standpoint, I have come to the firm conclusion that there absolutely is but one sole emergency in which the services of a type-writer can, *conscientiously*, be used with advantage. Yours truly,

F. LANCE.

P.S.—By the way, the emergency above referred to (and the privilege is strictly limited to florists *in good standing*), is this: whenever it may be necessary to send off large quantities of explanatory letters accounting for the nonfulfillment of the promises held out by the catalogues. In some establishments the work in this department is simply enormous.

F. L.

AGAPANTHUS.

THE only assignable reason why these elegant-habited greenhouse plants are not now so generally cultivated is that they are old-fashioned. They are among the easiest of plants to manage, bearing without injury usage that would kill most of the species subjected to pot culture. Their gracefully curved leaves, which in a well-managed specimen droop so as to all but hide the pot, render them at all times pleasing to look upon, and when, in addition, they are furnished with their straight, erect flower-stems, surmounted by dense umbels of blue or white flowers, there are few more telling plants. In addition to this they last a considerable time in bloom. The flowers, moreover, are among the most useful for cutting, either combined with others for ordinary decorative purposes or for bouquets; and for the latter use the blue kinds afford a color that is not over-plentiful in flowers that are of suitable form and of a durable nature. Agapanthus may be raised from seed, but, except in the case of a new or scarce kind, the usual course is to increase them by

DIVISION OF THE CROWNS.—This can best be done by taking a large plant in the spring just as growth is about to commence and washing all the soil from among the roots, so as to get them disentangled, as far as possible, without unnecessary breakage; then divide the crowns singly, or in masses of several together, according to the number and size of the plants required. Where there is no object in adding greatly to their number, large specimens may be simply divided into two or four, as may be required, with these, as with single crowns,

giving pots according to the size of the divided pieces, potting firm and encouraging growth by keeping them a little close in a pit or greenhouse. All that is required afterward is to give pot-room as wanted; but it must be kept in mind that these plants will bear confining at the roots to an extent that few will without suffering. When the specimens are as large as required, and are in from twelve-inch to sixteen-inch pots, they may go for two or three years without repotting.

They may be wintered anywhere out of the reach of frost—say under a greenhouse stage, or similar place where there is only a limited amount of light. Give little water through the season of rest.

The following are distinct and desirable kinds: *A. praecox* has blue flowers, distinctly suffused with purple—a much scarcer plant than the old species; *A. umbellatus*, the best known sort, bearing large umbels of dark-blue flowers; *A. umbellatus candidus*, a pure white sort—a decided improvement on the old white form; *A. umbellatus flore-pleno*, a double form of *A. umbellatus*, with deep-blue flowers—a fine kind; *A. umbellatus variegatus*, a variegated form, with prettily marked leaves. The species come from the Cape of Good Hope, *A. umbellatus* being among the oldest introductions we possess. Agapanthus are little troubled with insects. Aphides sometimes infest the young leaves, or, more commonly, the advancing flowers; when these are troublesome fumigate with some or other of the preparations of tobacco.

T. B.

ADDITIONAL BITS OF NATURE.

AN article entitled "A Bit of Nature" appeared in the FLORAL CABINET some time since, and suggested so many incidents in my own experience while botanizing that I am impelled to record some of them, thinking that they may be of interest to a few other readers of this magazine.

One need not be a botanist in the strict sense of the term to have a sufficient knowledge of plants and their habits to make her occasional walks in the woods or fields agreeably instructive.

After reading the description of a plant previously unknown to me, it has often been my good fortune to find it the next time I ventured into an unfrequented place. It seems as though the longing to verify the knowledge procured by reading had sharpened my observing faculties, else the plant had some occult means of reading my thoughts and took particular pains to attract attention.

I was much interested in Darwin's "Insectivorous Plants," and Mary Treat's account of her observations and experiments with the utricularia in "Home Studies in Nature," and only a few days after reading the latter book, in one of my rambles on the borders of a pond, I found the *Utricularia vulgaris*. My delight was unbounded, for I had never seen it before, and I recognized it at once from Mrs. Treat's description. How beautiful it looked floating about in the water without roots to confine it to any one place, or to give support to its long flower stem, which bears on its summit a raceme of curiously-fashioned yellow flowers! Its long, slender branches of finely dissected mossy-looking leaves amply supply the deficiency of roots, or the tiny bladders with which they are numerous provided, enable the plant to float in an upright position, and then by means of little valves they entrap animalculæ and the larvæ of insects and digest them for the plant's nourishment. Imagine my indignation when, after making this magnificent "find," I took up a work of Thoreau's and read the following note: "*Utricularia vulgaris*, common bladderwort, a dirty, ill-conditioned flower, like a sluttish woman with a gaudy yellow bonnet." Much as I admire Thoreau's keen observations of nature, I cannot easily forgive him for this slanderous attack upon a plant with such a wonderful life-history.

In a few paragraphs before this uncalled-for remark he writes that it is "scurrilous" for Gray to say that lupines were named from *lupus*, a wolf, because they "were thought to devour the fertility of the soil." This is a mild judgment in comparison with his own statement. Perhaps, if the hermit philosopher could have seen the blue lupines growing in the sandy soil of Northern Indiana, and extending in patches, sometimes to the exclusion of nearly all other vegetation, he would think Gray had authority for his opinion. But I am inclined to consider that the lupines kindly cover the ground with their brilliant bloom because nothing else will grow there.

A short time after seeing in the Bulletin of the Torrey Botanical Club an illustration of a fungus, the *Polyporus lucidus*, strongly resembling a profile view of the face of the Duke of Wellington, I found on a partially decayed hemlock log a polyporus bearing a likeness to an Arab's head surmounted by a turban. The eyes, nose, mouth, chin and beard were clearly marked, and nearly the whole surface of the fungus was beautifully polished, in color and brightness resembling a highly-finished piece of mahogany.

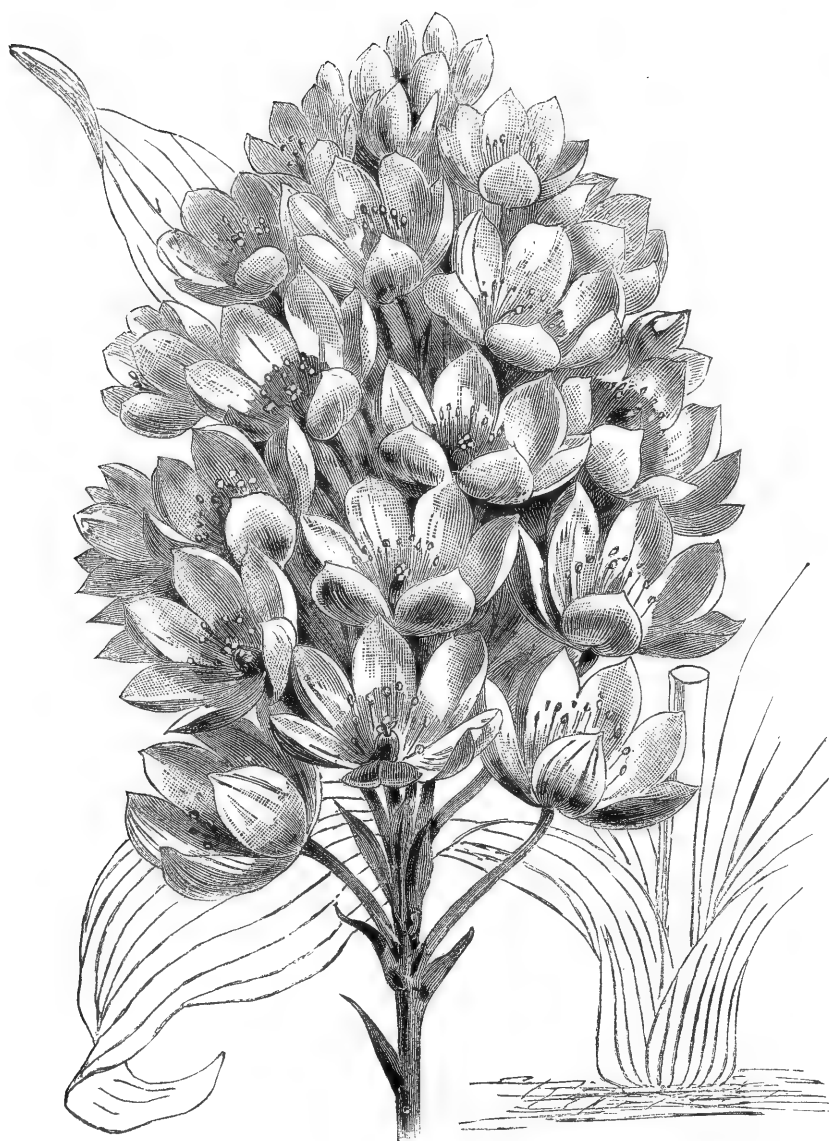
I have often noticed that after finding what I consider a rare specimen, merely because I have never seen it before, I come upon it very frequently, and then feel surprised that it is so common.

I walked nearly four miles "once upon a time" to procure the Indian pipe (*Monotropa uniflora*), but this past season the strange corpse-like flower came to me, for I found it in abundance in a grove but a few rods from the house. In a grassy path still nearer I found the *Lythrum hyssopifolia*, a small plant with a tiny purple blossom, and I am informed that it has never been discovered before in this vicinity. It is described in the botanies as inhabiting marshes, yet here it is on a hill-top, though the soil in the little section where it grows is damp or springy early in the season.

Probably everyone thinks his pet science the most delightful, but I cannot conceive of anything giving more intellectual pleasure and enthusiasm than botany, and judging from the experience of a writer in *Harper's Magazine*, who found sixty varieties of plant-life in his city backyard, we need not go beyond our door-yards to find a sufficient number of specimens for a season's profitable study. As my home is on the outskirts of a large tract of woodland, its door-yard affords an extended flora. Among the flowering bushes are the dogwood (*Cornus florida*), privet (*Ligustrum vulgare*), sweet viburnum (*Viburnum Lentago*), barberry, choke cherry and black cherry. The vines include the wild smilax or green-briar, woodbine (*Ampelopsis quinquefolia*), bitter-sweet (*Celastrus scandens*), and two varieties of wild grape. Besides the weeds common everywhere, yet pretty if we allow them more than a thoughtless glance, I find about my door the tiny, bright-flowered orange-grass (*Hypericum Sarothra*), blue-curly (*Trichostema dichotomum*), with its fascinating, long-curved stamens, the partridgeberry (*Mitchella repens*), the anemone (*nemorosa*), and white violet (*Viola lanceolata*). Among some rocks near the borders of the grounds are three varieties of ferns; then by including the trees, grasses, lichens, &c., we obtain quite a valuable flora.

Most of us do not care to seek for the hidden marvels and beauties near at hand, but prefer to roam far away for occasional rare "finds," when, perhaps, close study of nature right about our homes would reveal most delightful secrets.

CORA E. PEASE.



GOLDEN STAR OF BETHLEHEM (*Ornithogalum aureum*).

THE ORNITHOGALUM.

THIS is a somewhat extensive genus of liliaceous plants, natives of Southern Europe, Western Asia and the Cape of Good Hope. Several of the species are perfectly hardy, and increase so rapidly as to be considered troublesome. It does not make much difference what the plant is, neither how beautiful it is; if it increases too fast it is denounced a plebeian, and out it must go, to make room for forms that are expensive and difficult to manage. This is particularly true of *Ornithogalum umbellatum*, the pretty little Star of Bethlehem, that has escaped in many places from the gardens and taken full possession of the orchard and meadow. Yet there is no spring flowering bulb more beautiful, or one that can be more profitably employed in shaded and waste places, as it will grow any-

where, and like all other good dispositions it will smile sweetly under all circumstances. This plant has received its common name from the fact of its being abundant in Palestine and having star-like flowers. Its bulbs, which are wholesome and nutritious when cooked, are largely used as food in Eastern countries.

O. caudatum, a tender species from the Cape of Good Hope, has very large, watery-looking bulbs; the leaves are long and broad, and they wither and shrivel up at the tip, so as to have a round, tail-like appearance, whence their common name, "long-tailed ornithogalum." This species is sometimes called "Onion Lily," and is a favorite with the Chinese, who grow it in dishes filled with water and gravel. Its tenacity of life is most remarkable, as it will

grow anywhere and under almost any circumstances, in water or hung up against a wall in a dry room, in rich earth or poor, indoors or out, and with slight protection will endure our winters. Its flower scape is from two to four feet in length, and it keeps in bloom for several months. Its flowers are not showy, but exceedingly interesting.

O. aureum, the subject of our illustration, is one of the most showy of the species. Its flowers are produced in racemes from twelve to eighteen inches long, and are somewhat variable in color, which runs through several grades of yellow. They also vary materially in form, some expanding widely, while others are cup-shaped; as

the inside of the flowers is by far the brightest, the open forms are the most desirable. The flowers are not all evolved at once; but the raceme continues to elongate, and the blossoms to expand, during a period of several weeks. The racemes, if cut and put in water as soon as the flowers first open, will remain as fresh for several weeks as if on the plant. This species is easy of cultivation, its home is the greenhouse, but it succeeds well as a window plant, and it thrives luxuriantly in the open border. The bulbs should be taken up in autumn and kept in a dry situation, away from frost, the same as the gladiolus is treated.

YELLOW FLOWERS.

THERE appeared quite recently in two magazines two articles stating the fact that there was a strong tendency toward the introduction and use of more yellow flowers, which taste accords heartily with my own, and I want to call attention to three of my favorite and altogether satisfactory plants, taking the third in favor first. Abutilons John Hopkins and William Fowler are both exquisite in color. The first is a flower of deep golden yellow and great substance. My plant in a tub (barrel sawed in two) is full five feet high and three feet in diameter, branching from the very bottom, every branch laden with its bell-shaped blossoms, with stems full five or seven inches long. William Fowler is to my mind the more desirable, as it is more delicate, both in color and texture; it is also longer in the bell. These plants are very satisfactory; with four varieties in tubs standing side by side—Boule de Neige, white; Lantana, scarlet; John Hopkins and William Fowler, yellow—it will not take a strong imagination to form some idea of their beauty. I begin to pinch out terminal buds when the plants are only four inches high and continue it all the time, never allowing one branch to outgrow the others or to crowd them. I tie with soft string all branches that seem disinclined to go where I wish them to fill up the open spaces.

In these tubs, which are painted vermilion, with black bands, I have planted *Lycopodium arborea*, which forms a full exquisite mat over the whole earth, and hangs in graceful sprays over the side to the bottom. My second favorite is what with us is almost as common and despised as golden-rod, namely, *Narcissus Jonquilla* and *trumpet*. I know no yellow that is half so exquisite in tone as the yellows contained in the many species of our narcissi. My prime favorite, though, is the trumpet major, with deep golden crimped trumpet and sulphur-colored, twisted perianthium. It blooms here in the South with even snow on the ground—without fail by roth of February,—and with us is our first harbinger of spring, even ahead of our dear English violets. Why the flower-loving community has allowed these beautiful flowers to become almost unknown is a mystery to me. With us even they have been neglected, but in many kitchen gardens long vegetable beds are bordered with them. Coming up in the fall they give a well-defined border, and in the spring are beautiful, like a band of gold and green. But my

great favorite is our Carolina yellow jasmine, botanically *Gelsemium sempervirens*, which in bleak, cold blustering March crowns our woods with a yellow glory. No one, without seeing for himself, can realize the exquisite beauty of flower, vine or fragrance. At the word jasmine all remember the subtle odor of this class, but none to me is so entrancing; not strong enough to be unpleasant to the most delicate invalid, but exhaling a perfume that intoxicates one with its sweetness.

This altogether flawless, peerless vine is a habitant of our forest, on the watercourses from Virginia to Florida. It is an evergreen vine, with long, narrow, crisp green leaves, like that of gardenia. In all my life I have never seen an insect on either native or cultivated specimens. Winter and summer it is attractive, and with the wisterias and narcissi early in March its beautiful clusters of pale, delicate sulphury trumpet-shaped flowers bedeck our woods with golden glory, trailing upon the ground for ten or fifteen feet, up every shrub that it encounters; from thence it clammers to the tops of our tallest trees and shrubs, waving its graceful, pendulous branches far out over the streamlets. The young folks make daily jaunts for it, coming back loaded down with branches trailing in the dust behind them, with belt and breast bouquets and hats entwined with it, distributing lovely clusters to those they encounter on the way. The more mature return from their drives with laps piled with it.

This vine has a double variety, found near Columbus, Ga., and from thence procured and propagated by our veteran horticulturist, P. J. Berckmans, who sent one to a lady in New York fifteen years ago, and she reports it as one of her hardiest and most continuous house bloomers. Winter and summer it never ceases bearing its cluster of flowers. I have never, until now, experimented with it, but have grown in pots during the past winter both the double and single varieties, to see if I could procure flowers under glass. The flowers were shaped exactly like *Weigela rosea* and about the same size, but were borne on long, slender delicate ebony-colored stems, with an abundance of its crisp green leaves interspersed, thus rendering other foliage unnecessary.

MRS. J. S. R. THOMSON.

SPARTENBURG, S. C.

THE AMARYLLIS.

THE following article on amaryllis culture may be read with interest and profit by the many that are now seeking the information it so fully and clearly gives :

"We are now quite in the midst of the blooming season of this gorgeous spring flower, and no better time could be chosen than the present to make a few cultural remarks upon it. At such a time it is a great pleasure to those who have kindred tastes to visit each other's collections, and if, as they ought to be, they are liberal minded, to exchange views upon the new seedlings in flower, and to instruct each other as to the cultural requirements of the plants. There ought to be no secrets between brother cultivators ; for my part I never had any, and every detail of the culture which our plants receive is open to anybody. In order to insure complete success, it is not so much this or that system of culture followed in itself, as it is the constant loving attention to the plant—the watching by night and day, giving attention to every minute detail, until it becomes a labor of love. Anything short of this will not insure success.

"Notwithstanding the unpropitious weather during the whole of the growing period, our plants have been stronger and have flowered more freely this year than they ever did before ; the strongest bulbs have produced three flower scapes, and some of the scapes had six flowers open at one time. A few years ago some of the best varieties had but two flowers on a scape, a characteristic borrowed from such fine varieties or species as *A. Leopoldi* and *A. Acramanni pulcherrima*. These, though very distinct and beautiful, make a poor effect in collections in comparison with such grand varieties as the Empress of India, towering aloft with three scapes from one bulb, and as many as six flowers on a scape. This handsome and richly-colored variety is not only one of the most beautiful, but also the most prolific variety known to me. I saved seven seed-pods from one bulb, and from those seven pods we raised 700 plants, or an average of 100 plants from each pod. This variety being crossed with those species having well-formed flowers, but only two on a scape, has increased their numbers and improved their form—in fact, quite revolutionized this beautiful group of plants.

"Empress of India, as well as many other vigorous and handsome seminal varieties, were introduced from the Continent by Messrs. Veitch, of Chelsea. To these introductions, as to *A. pardina*, *A. Leopoldi*, and their own seedling forms, we owe the very numerous fine varieties now in cultivation. Mr. B. S. Williams, of Upper Holloway, has also raised many distinct and beautiful seedlings, especially of the autumn-flowering type. Dr. Masters, a seedling variety raised in the Holloway nurseries, is very distinct and beautiful.

"The plants will soon be going out of bloom ; and perhaps that is a critical season for amaryllis, although it need not be, if cultivators would bear in mind that the

plant has to make its growth, and that on its perfect development depends the success or failure of the bloom for the next year. I advise the grower to examine a bulb as soon as the flowering period is over, and it will be found to have shrunk up to less than half the size it was when potted in January. It has developed leaf and flower scape, and during the process seems to have very considerably exhausted itself in the space of two months. But examine it again at the end of two months, and it will be found to have increased to more than double its size, and be quite hard and plump. It was empty in March ; in June it is again full of the incipient leaf and scape.

"As soon as the flowering period is over we plunge the pots containing the plants over the rims in tan ; new roots are rapidly formed, which push over the rims into the tan, and grow with the greatest vigor in a stove temperature, a bottom heat of eighty degrees, and with a moderate supply of water at the roots. We never give any manure water. If any seeds are being saved they will be ripe in July. The right state of ripeness is reached when the pods burst and the black scaly seeds can be seen inside

"It is advisable to sow the seeds in sandy soil as soon as they are ripe. The plants will be up and ready to be pricked out before the end of August. We prick a dozen of them out into a five or six inch pot, and if the pots are plunged into a tan-bed the little plants will grow to a considerable size by the end of the season. Meanwhile, we have not been neglecting the old plants, and by the end of August their growth will very nearly be completed. Less water will then be required, and about the end of September it will be prudent to withhold it altogether. All the spring-flowering varieties lose their leaves, and when water is withheld the leaves gradually decay, and of course must be removed ; then the plants enter into their season of what seems to be complete rest. But there is no such thing in their history as complete rest, for through the winter the flower scapes are in a course of regular development ; and by the time for repotting, about the middle of January, many of the scapes will be protruding from the sides of the bulb.

"Some time in December we mix our potting soil, consisting of three parts good loam, one part peat, one part leaf-mould, one part rotted manure, and some coarse white sand. This compost is laid up in a heap out of doors, but sheltered from heavy rains. At potting time, in January, the bulbs are shaken quite out of the old compost and are repotted. We do not pot them very deep into the compost ; half the bulb or more is left out of it ; but we press the potting soil firmly round the bulbs. For the very large bulbs, from a foot to fifteen inches in circumference, we use seven and eight inch pots. On the other hand, good flowering bulbs are potted in five and six inch pots.

"In reference to the seedlings the treatment they

require is as follows: At potting time, in January, the small plants, a dozen in a pot, will be quite green; not having lost a leaf. Let them be repotted, three bulbs in a five-inch pot, and plunge them again in bottom heat. They will grow freely during the season, producing bulbs as large as pigeon-eggs, some of them perhaps larger. Withhold water during winter, but not yet will the leaves die down. They will keep green in winter until the plants grow to the flowering size. The bulbs are now large enough to be repotted separately, each one in a five-inch pot; a few of them will flower, but most of them will do nothing more than produce flowering bulbs for the following season, which will be the third from the time of sowing the seeds.

"The culture of the amaryllis is very simple—a season of growth and a season of rest. During the growing period it is a stove plant, requiring a warm, moist atmosphere; and if the temperature and atmospheric moisture are right, insect pests will not be troublesome. When kept too warm or too dry, red spider and thrips will attack the leaves. We destroy the red spider by

syringing, and the thrips by fumigating with tobacco-smoke. This will kill both yellow and black thrips; the latter are, however, not so easily settled, for they drop off as soon as they smell the smoke, and get up quite lively the next morning, unless the smoke is almost dense enough to injure the plants.

"Many good varieties are lost by the decay of the bulbs. This is very annoying, and is often caused by their being watered too soon after repotting. They ought not to have any water until fresh roots are formed, and that will not be until three or four weeks after they have been repotted. It is important also to avoid syringing or watering them overhead in the early stages of their growth. When water has to be applied to the roots, I am careful not to wet the bulbs. Of course, when the pots are full of roots, and the plants in free growth, the time of danger is past, and water may be applied to the bulbs freely. Some varieties suffer much more from decay of the bulbs than others. Seedlings of *A. pardina* are the most liable. The Empress of India type are of the hardiest constitution."—*James Douglass, in Gardener's Magazine.*

THE VEGETABLE GARDEN.

Dwarf or Bush Beans.

UNDER the name of bush beans, I think we can safely include all the low-growing sorts that are classed in the different catalogues as bush, dwarf, snap or string beans. Most persons have the impression that bush beans do best on light or poor soils. Now this is a great mistake, for although they can be grown in poor soil, yet, like all other vegetables, they readily respond and are more profitable when grown on highly-cultivated land. They prefer a deep, loamy soil, one that has been heavily manured for a previous crop; if rank manure is used it is apt to make them run too much to vine.

The best method of cultivation is to give the ground a good dressing of well-decayed stable manure and then plow it in and harrow thoroughly so as to level it as nicely as possible.

The ground being properly prepared, the next step is the planting of the seed. Mark off the ground in drills two feet apart, and about three inches in depth, and drop the seed about three inches apart in the drills, and cover to the depth of two inches.

As soon as the plants are well up they should be hoed, and it is best to cultivate them frequently until the time of blooming; if they are disturbed after commencing to bloom it prevents their setting well.

Great care should also be taken to avoid cultivating, or indeed handling the plants when wet with dew or rain, as it causes both foliage and fruit to rust and greatly injures the crop.

It must also be remembered that beans are quite sensitive to frost and wet, so that it is not advisable to plant them very extensively until the weather has become warm

and settled, but as it is desirable to obtain a crop as early in the season as possible, I invariably make a planting about the 25th of April, another on the 30th, and again on the 5th and the 10th of May. After this, if successive crops are desired, a sowing should be made every ten days until the 1st of August. By following this course there is little or no delay in case any of the earlier plantings are destroyed by frost.

For planting previous to the middle of May the Early Mohawk should be chosen. Of the many varieties in cultivation, the most desirable for amateurs are the Early Mohawk and Early Valentine for the earliest crop; China Red and Refugee for the main crop as well as for later use. For the benefit of amateurs I will briefly describe them.

Early Mohawk.—This variety is the one best suited to northern latitudes, as it is the most hardy and is therefore always used for the earliest plantings. It is a strong grower and is remarkably productive, the pods being five or six inches in length.

Early Valentine.—This is one of the finest of the green podded varieties, and it continues in that state longer than any other. It is equally as productive as the Mohawk, the pods being of medium length, fresh and tender.

Early China.—This is a few days earlier than the preceding, but hardly as productive; pods short and flat, of good quality if picked when young. This variety is excellent when used as shell beans, and when dried is desirable for winter use.

Refugee.—This is a late sort, and is grown very extensively for pickling. It grows freely and is enormously productive of long, medium-sized cylindrical-shaped pods.

Beets for Winter Use.

I think that one of the greatest pleasures of amateur gardening consists in the fact that the proprietor knows that he has at his command an abundant supply of vegetables of the very best varieties, and of the finest possible quality. During the summer months there is no difficulty in securing an abundance, but in the winter the supply is limited enough indeed.

I desire to call the attention of amateurs to the value of the beet as a vegetable for winter use, and to urge them to give it a fair trial for that purpose. In order to have the crop of the finest quality the beets should have a rapid and uninterrupted growth from the start, and to secure this they should be given a deep, well-prepared soil and thorough cultivation. A light, loamy soil is the most suitable, although any other will answer as well, providing it is thoroughly enriched by well-decayed stable manure, ploughed in as deeply as possible, and then thoroughly harrowed and levelled. I may here remark that all of this preparatory work can be done on a limited scale with a garden fork and rake.

The seed should be sown in drills about eighteen inches apart and three inches in depth. Sow rather thinly and cover to the depth of two inches.

The varieties usually grown for winter use are the Blood Turnip, Half-Long Blood, and Long Blood.

The Blood Turnip is considered to be superior to all, and, for amateurs, equally well adapted for summer or winter use. As its name indicates, the root is tur-

nip-shaped and of a deep blood-red color, and as it matures early can be sown at any time up to the last week in July.

The Half-Long Blood is very highly appreciated by all who have grown it, and is of a half-long shape and of a very dark blood-red color. To have this variety do well it should be sown on a deep, well-enriched soil during the early part of June.

The Long-Blood grows from twelve to fourteen inches in length and from four to five inches thick. It is of a deep blood-red color, and is much esteemed for winter use. The character of this variety depends most essentially on the manner in which it is grown; therefore, in order to grow it to perfection, the seed should be sown early in June in a deep, well-prepared soil.

After the seeds are well up and the young plants strong enough to handle they should be thinned out so that they stand from three to four inches apart. After this they should be well cultivated at all times, so as to keep them clean and free from weeds until the approach of frost, when they should be taken up carefully, and after the leaves are cut off to within two inches of the crown, placed in a dry, cool cellar, and covered with earth or sand until they are wanted for use. In taking up the roots great care should be exercised to avoid mutilating or injuring them. If they are placed in fresh cool water for several hours before they are cooked they will be wonderfully improved thereby.

QUEENS, N. Y.

CHARLES E. PARNELL.

TUBEROSES FOR AMATEURS.

SO much has been said and written about this popular flower that I hardly know whether or not I can add anything that will be of benefit, or help simplify the culture of it. The greater number of articles that have appeared from time to time have, however, been intended more particularly for the professional florist and cultivator, and, for this reason, I have thought best to tell what I know about the culture and growth of this plant. If possible, always purchase Northern-grown bulbs, as they are more certain to give satisfaction and always seem to start with more vigor than those grown in the Southern States; at least, this has been my experience. The bulbs may be planted out in the dry state from the 20th of May on, always selecting, if possible, a strong, rich soil, composed of a sandy loam. Plant about one inch deep and stir the ground occasionally to prevent baking, or the bulbs may be started in boxes or pots in the sitting-room or hotbed, and pots holding about one pint are plenty large for one bulb each. If wanted for early blooming, they should be started in pots about the 10th to 20th of April, and they will then be ready for turning out in the open border as soon as the danger from frost is past. After potting, a light sprinkling of water should be given, but don't soak the soil, as the bulbs do best to start their growth a little dry than otherwise. Maintain a temperature as near 55° as possible, and they will do nicely. Any

good garden soil, mixed with one-third sharp sand and one-third well-rotted manure, all thoroughly mixed together, suits them as well as anything. As soon as the flower-shoots begin to appear, which will be in or near the middle of July, provide stakes for them and tie securely when they have attained a height of one foot. In the course of ten days or two weeks they will need to be tied again.

For late flowering it is just as well to plant the dry bulbs, as then you can have a succession of bloom; while, on the other hand, if all are started in pots, the greater part would all be in flower at the same time. In the fall, after the frost has cut down the growth, it is customary for people to dig up the old clumps, but this does not pay, at least nowadays when you can buy in the spring splendid flowering bulbs for the trifling sum of a dollar per dozen; besides these old bulbs seldom flower a second time. They have been known to do so, but such cases are very rare, and it don't pay to take any risks of this kind if we desire tuberoses for button-hole bouquets in summer. In selecting the bulbs always choose those that show life down in the centre of the bulbs. Many thousands are annually sold that are utterly worthless, having been damaged in curing or from other causes.

Don't make too much of the size of the bulbs; better far have smaller sound ones than very large ones that

have not been properly cured. And now, in conclusion, allow me to say, that if your Pearls or doubles come single occasionally, or most always, don't blame your florist; this is a freak of nature, over which the florist has no control. Tuberoses are always liable to sport more or less, sometimes changing so that nearly the whole stock will come single, and the next year revert-

ing back to double; at least this has happened twice in my experience.

I cannot close without urging the more extensive planting and cultivation of this flower. It is a universal favorite where known, and is growing in popularity every year. It is cheap, and in reach of persons with limited means.

ALBERT WILLIAMS.

THE FLOWER-DE-LUCE.

"Twine me a wreath of flower-de-luce."—OLD POET.

IT is curious how much superstition and romance have clustered around some of our simplest common flowers. The lily and the rose from time immemorial have figured in the everyday life of nations, and have a thousand memories connected with them. Who of us has not, as a child, spent hours in looking for the four-leaved clover that was to bring untold good fortune? Even the thistle is not devoid of classical associations and folk-lore. Nor is the flower-de-luce, botanically *iris*, the popular name of a genus of perennial plants of the natural order *Iridaceæ*, inferior to any of these. It has a history that is quite as interesting as that of any other flower, though for some reason it has not received the attention that has been accorded to its rivals in popular esteem.

The generic name of this plant is derived from that of Juno's attendant and the graceful messenger of all the gods, the beautiful Iris, obviously because its colors are similar to those bestowed on that classic goddess by the poets and mythological writers. Iris is usually portrayed as descending from a rainbow; and the eye of heaven (Plutarch says that this is the meaning of the word *iris*) is not more variegated than the flower that has been honored by her name. Ovid speaks of

"The various Iris, Juno sends with haste,"

and Virgil, in one of his finest passages in the "*Æneid*," sings,

"Iris, on saffron wings arrayed with dew
Of various colors, through the sunbeams flew."

The plants of this order are endogenous, having a creeping rootstock (rhizome), or else a flat tuber (corm), equitant or ensiform leaves, irregular flowers, three stamens and an inferior ovary. They are represented equally in the temperate and hotter regions of the globe. The wild species of *iris* are generally called blue flag, and the cultivated flower-de-luce, from the French *fleur de Louis*. King Louis VII., of France, on his departure to the Holy Land in the second crusade, adopted the purple *iris*—*I. Germanica*—for his emblem. So the flower-de-luce, as well as the lily, led crusading hosts to victory.

Shakespeare, in his comedy of "*The Winter's Tale*," speaks of our flower, naming it among the favorites of the garden—

"Lilies of all kinds
The flower-de-luce being one."

It is not a lily, however, as we have seen, being entirely distinct in its botanical formation.

The ancient badge of Florence was the flower-de-luce. The flower grows in profusion in the valley of the Arno,

and some of the early coins of the republic are stamped on the obverse with the device of an iris. Cosmo de Medici dreamed one night that an angel held out to him a blossomed flower-de-luce, and told him by that sign to conquer. Ever after a white iris on a red shield became the arms of that family, and his descendants made the flower famous in the annals of heraldry.

Among the flower-de-luce common in Europe are *I. Germanica*, probably the Illyrian iris of the ancients, the purple blossoms of which were a fashionable concomitant at the banquets of the rich in Athens; *I. pallida*, a native of Istria, with pale-blue flowers; and *I. Florentina*, indigenous to the Macedonian coast and Asia Minor, having white flowers. The underground stems of these three species constitute the "orris-root" or *rhizoma iridis* of pharmacy, formerly known as "ireas" or "orice," which is exported in considerable quantities from Southern Europe, more especially from the neighborhood of Leghorn and Trieste. To prepare orris-root the rhizoma is in August dug up, freed from rootlets and brown outer bark; it is then dried and packed in casks for sale. Orris-root in commerce consists of whitish, knobby, sometimes branched pieces of about the thickness of the thumb and having on one side numerous pits where the rootlets were attached. It has a bitterish or acrid taste, and is purgative and emetic in its properties. By drying it acquires the odor of violets.

By the ancients orris-root was valued both for its odor and its healing virtues; and in England it was in past times in repute as a medicine for various complaints. Gerarde states that "the root of the common flower-de-luce cleane washed, and stamped with a few drops of rose-water and laid plaster wise upon the face of man or woman, dothe in two dayes at the most take away the blacknesse or bluenesse of any stroke or bruise." He further advocates the use of the same remedy in dropsy and in infirmities of the chest. It is now employed in the preparation of violet powder and of scented hair and tooth powders, oils, and as a perfume for the breath. It is exported to India, where it is called *behhunufsha* (violet root.)

Many kinds of flag are cultivated in England, but only two species are indigenous. One of these, *iris pseud-acorus*, the yellow flag or iris, is common in Britain on river banks and in marshes and ditches. It is called the "water-flag" or "bastard flower-de-luce" by Gerarde, who remarks that "although it be a water plant of nature, yet being planted in gardens it prospereth well."

Its flowers appear in June and July and are of a golden yellow color. The leaves are from two to four feet long and half an inch to an inch broad. Towards the latter part of the year they are eaten by cattle. The seeds are numerous and of a pale brown color; they have been recommended, when roasted, as a substitute for coffee, of which, however, they have not the properties. The other British species is the *I. fetidissima*, the foetid iris.

Our commonest blue flag (*I. versicolor*) is a widely distributed plant, its violet-blue flowers, upon stems one to three feet high, being conspicuous in wet places in early summer. The root of this possesses cathartic and diuretic properties, and is used by some practitioners. The slender blue flag, *I. virginica*, found in similar localities near the Atlantic coast, is smaller in all its parts. A yellowish or reddish-brown species, resembling the first-named in appearance, is *I. cuprea*, found in Illinois and southward. There are three native species which grow only about six inches high and have blue flowers, *I. verna* and *I. cristata* in Virginia and Carolina, and *I. lacustris* on the shores of the great lakes.

The garden species of iris, the true flower-de-luce, are numerous, and these, by hybridizing and crossing, have produced a great many known only by garden names. The dwarf iris, *I. pumila*, from three to six inches high, flowers very early and makes good edgings to borders. The common flower-de-luce of the gardens is *I. Germanica*, the same that was made the heraldic bearing of the French crusading king. The *I. flavescens* has yellowish flowers like the British *I. pseudacorus*, and the recently-introduced *I. Iberica* presents a remarkable combination of colors. *I. susiana*, the mourning or crape iris, is one

of the finest of the genus, its flowers being very large, dotted and striped with purple on a gray ground. There are several species of iris with bulbous roots, such as the Spanish iris, *I. xiphoides*, and the Persian iris, *I. Persica*, with exquisitely scented blossoms of an elegant pearly-whitish hue, admirably adapted to forcing in pots for the drawing-room.

We remember the flower-de-luce as one of the most dearly prized flowers of our childhood; we plucked it without one thought of the sentiment of the royal flower which kings had borne to battle and which had flashed as armorial bearings on feudal banners in the streets of Florence during the wars of Guelph and Ghibeline, of Medici and Pitti. The flower is typical of the fair goddess from which it takes its generic name.

"All with their pearls so fair,
The gay flowers wreathed were,
But midst them all,
Crowned at the rainbow festival,
A sapphire-colored blossom shone
The loveliest there; no other one
Her jewels wore
So gracefully. Her robe all o'er
Was radiant, yet deep blue, like twilight sky,
And softly shaded, as when clouds do lie
Upon the deep expanse. 'Twas strange, none knew
A name for this fair form, so bright and blue;
But sister flow'rets fancifully said,
As they to note her beauty had been led
By its enchantment in the rainbow shower,
They e'en would call her Iris from that hour."

F. M. COLBY.

HOW TO KEEP CUT-FLOWERS.

I HAVE been greatly interested the past winter in the keeping qualities of many flowers, and the methods of preserving them when cut; of course when they are scarce one is more likely to take better care of them, but changing the water and putting a little ammonia in it, though good as far as it goes, will not do everything. I have observed that it is the night-light, gas, or lamp, that wilts them soonest, and have found that many sorts will keep fresh for a week if they are placed at night in a bowl set in a cool place and covered with a cloth. In the morning they should be returned to vases filled with cold water.

The family of tropæulums, of which the canary-bird flower is an illustration, will live and give new florets for a month if a long spray is broken off and placed in plenty of water. If placed in a long bottle behind a picture this plant blooms very effectively in water during the late autumn; snowdrops and daffodils picked in bud will keep in water for three weeks, and the blossoms are larger than if allowed to come into full bloom on the parent stalk. Many of the wild-flowers, too, are more enduring if cut in bud. I often keep roses for a week by gathering them when the buds are soft and the first leaf beginning to uncurl, and placing them in a shallow dish of cold water in a dark cellar, with moss over the stalks.

During the past winter some of the florists have tried the experiment of keeping flowers packed in infusorial earth. Whether the earth has any qualities for preservation, or simply keeps out the air, I do not know, but the flowers kept fresh and beautiful for several weeks. An experiment is to be made of sending them to England in this way during the Colonial Exhibition.

My own theory, as before stated, is that gas-light has the most injurious effect, just as the artificial light causes hyacinths grown in water to grow more during the evening than during the sunless afternoon. Almost any flower but wild-roses that drop so quickly, will retain their beauty and freshness in a dark cellar, kept in ice-water with moss. Of course professional florists have their methods, but my experience is simply for the amateur who is often anxious to keep fresh a dearly-prized flower. Clipping a trifle from the ends is sometimes practised, but I cannot vouch for its merits, nor do I know of any satisfactory method of restoring flowers that have faded after evening wear. But to keep them fresh for a week is a simple matter, if one is careful to keep them from the light and to have the water perfectly cold.

ANNIE L. JACK.

A WREATH OF JUNE ROSES.

MISS GREYSON was old and faded, but that did not hinder her enjoyment of the delightful summer that was everywhere about her. The beautiful June-time weather was abroad; every leaf and blade felt it; every bird knew it. Miss Greyson knew it too, sitting in her vine-covered, vine-wreathed porch with her thin hands resting quietly on her lap, and her face taking on a far-away look as she gazed on the western sky, and then turned suddenly to Rose Day, as she came tripping down the country lane, and turned aside—yes, she was coming to her door.

Rose was always a pleasant sight to behold—more than that, she was a cheering sight, for she had a beautiful face and was unconscious of it. Her eyes were a deep, purple blue; her hair, soft, wavy gold, and her fair complexion, with red, rosy cheeks, made her a picture of health and happiness.

Had Rose's mother possessed wealth it might have made her child vain, and in a measure dwarfed her life. But she was only a soldier's widow, drawing a small pension. Their little cottage home, with its acre of ground, was their own, and that was about the extent of their worldly possessions. But they had a taste for flowers; "if they hadn't, they should *make* a taste," Mrs. Day quietly informed a neighbor.

Lovely flowers bloomed in their garden. Early in spring-time they began to grow, and they bloomed till late in autumn when the last chrysanthemums were gathered. Roses grew in abundance. The lovely hawthorn roses that "ope in the month of May;" great "double" roses, regular old-fashioned flowers, and sweet as the breath of the morning; faint blush roses, and the lovely little Scotch roses, a clear white. Oh, what a bewildering bower was Mrs. Day's front-yard in the fragrant June-time, and the fairest rose of all—ah! it was Rose Day.

Seated in the vine-covered porch, her face shaded by the western light, was Miss Greyson, thinking—and not sadly thinking—that to-morrow would be her birthday.

Youth had passed, middle age had ripened, and just how many years to-morrow would score I cannot tell, but to-morrow would be her birthday, as she told Rose, who had taken a seat beside her.

"To-morrow your birthday. Why, Miss Greyson—"

"Well, dear, what is it? You are thinking what an old lady I am growing to be?"

"No; I was not thinking that."

"Perhaps wondering if I were ever young and fair? Child, my eyes were once as bright as yours, and my hair unfaded. But it is not so sad to lose the outward charms of youth if the heart is still young. Consider the June-time. When will it grow old?"

"Never, oh never, Miss Greyson, and I know another thing—a little secret I will tell just here. You are going to have a present on your birthday."

"A present, child! Who will bring it?"

"Oh, the birds of the air, on the wings of the morning."

While the conversation is lengthened a little we will glance at Miss Greyson's history.

Early in life she was the centre of a large and happy family, but one by one death claimed the little band, till now they had all passed on but herself and one brother, long distant in a foreign land. The property had also gone, and Miss Greyson barely eked out a subsistence; still she was cheerful, always trusting. Were not the sparrows fed? Where was her faith? Truly she had said growing old was not to be considered if she but kept her heart young. And to-morrow was her birthday.

It proved one of June's loveliest days. The stars paled and the east grew rosy, the morning wind blew over the hill-tops, the little birds grew jubilant with trill and song, the streamlets laughed and the trees clapped their hands for joy. The lap of the summer was full. Into this fullness stepped Rose Day, to gather from her mother's garden the birthday gift she had promised Miss Greyson. It was to be a wreath, a wreath of June roses, which when woven, all shining with the morning dew, was indeed a thing of beauty. It was Miss Greyson's birthday, and it was also her own. Seventeen to-day; that was what she said to herself as she slipped the wreath upon her arm and stepped upon the walk in her pale blue dress, a very vision of summer.

"Will you please direct me to Miss Greyson's?" asked a clear, manly voice, accompanied by a respectful raising of the hat.

"Oh, yes," answered Rose, with simple grace, "I am now going there."

And soon before Miss Greyson, as she stood upon the porch, there appeared a vision she will never forget.

Explanations followed. The gentleman was Harry, her brother's son, come, he said, "to take his old aunt home."

It was indeed a wreath of June roses.

Lightly Rose placed the crown upon the once bright hair and swiftly vanished.

"Roses fade," murmured Miss Greyson, as she laid them aside, "but kind deeds, never."

"Who is that girl?"

"That girl, my dear Harry, is Rose Day."

After that matters went on much as usual. While Harry remained at the cottage it was noticeable that Rose became shy, but when another June-time crowned the earth, another wreath of roses was worn, this time upon the golden hair of Rose. It was a bridal wreath, for the day was the wedding-day of Rose and Harry Greyson, who confessed that he lost his heart one morning just a year before to a—vision of the summer. Although Harry did not possess a large fortune, Rose, as his wife, found many opportunities of doing good.

"Ah, but," says Miss Greyson, "a kind and loving heart will carry its wreath of roses always."

L. EUGENIE ELDRIDGE.

HOME DECORATIONS.



DESIGN FOR FIREPLACE SCREEN.

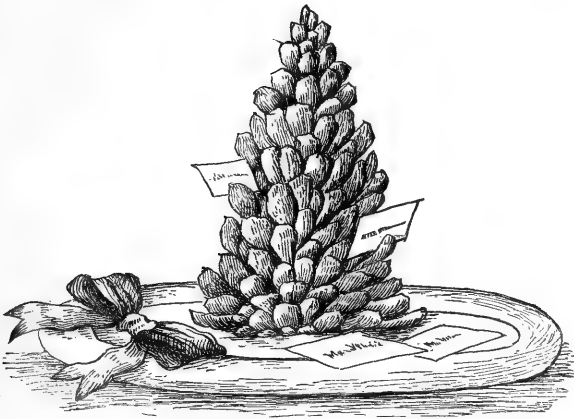
Summer Decorations for Fireplaces.

MANY fireplaces are not sufficiently pretty to be visible when the time for open fires is past, and yet it is a puzzle to know just how they can be made more pleasing to the eye.

If it is an open fireplace the prettiest manner of decorating is to fill it with growing ferns, concealing the pots in which they are planted with moss; and if the ferns die replace them from time to time, as may be necessary,

with fresh ones from the woods. Place above the ferns, slanting from side to side of the fireplace, a branch covered with gray lichen, and if possible a stuffed squirrel, as if it were running, or a gay-plumaged stuffed bird. The effect is more pleasing than can be imagined. Should the fresh ferns be considered too troublesome, as they will of course require care, a moss-covered log can be laid across the andirons, and the squirrel or bird placed on this.

Another and perhaps more practical method is to con-



CONE CARD-RECEIVER.

ceal the entire fireplace, whether it be open or closed, with the summer piece which usually shuts off the fireplace during warm weather.

For the purpose matting is serviceable, common white matting of which the width is used for the length; therefore the selvedge forms a firm, substantial heading for the top, the sides are hemmed and the bottom fringed out two or three inches.

For design the scarlet trumpet creeper is very beautiful, and the color of the matting forms a pretty background for the gay scarlet flowers with their dark green foliage.

The following tubes of oil-colors will be required, and Winsor & Newton's are best:

Vermilion, crimson lake, Naples yellow, Prussian blue, burnt sienna, vandyke brown, flake white, chrome yellow, chrome green, and a tube of megilp for thinning, if necessary. The leaves are green, deepening the shade by adding a very little Prussian blue and vandyke brown, or making lighter when necessary by adding a little white.

The throat or tube of the flower is of chrome yellow mixed with white and a very slight particle of vermilion. The shading is done by adding or blending in, when necessary, a very little vandyke brown. The petals are vermilion, shaded with crimson lake, the stamens of chrome yellow. The calyx is of chrome yellow, shaded with vandyke brown and burnt sienna, also a slight coloring of green, but the bright light of chrome yellow only.

The stems are Naples yellow shaded with brown, either sienna or vandyke. If the yellow trumpet creeper is preferred to the scarlet the subject may be treated in the same manner, substituting chrome orange and chrome yellow for the flowers in place of the vermilion and crimson lake, which are used for the scarlet flowers. Chrome yellow is for the light and chrome orange for the shading.

Either the scarlet or yellow flowers will prove very pleasing, or a combination of both is very beautiful.

Other materials also can be used, as for instance, satin, on which this or any other design can be painted with water-colors, or oil-colors can be used according to directions, which have been already given in the CABINET.

It will be necessary to line and interline the satin, as it is not sufficiently stiff to look well without; therefore,

cotton flannel for an interlining and soft cambric for the outer lining answer very nicely.

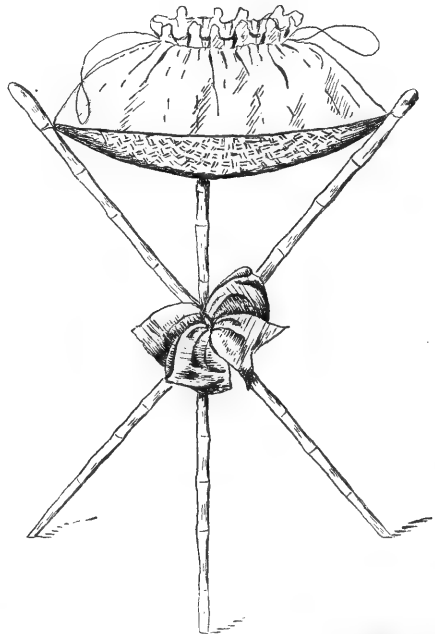
The bottom can be trimmed with gaily-colored drop balls, or fringe of any kind that may be desired. If the mantel-piece is of marble, and the framework of the grate metal, the panel, whether of matting or other material, can be hung by sewing on the back of the upper edge strong pieces of wire, bent hook-shape, and these can be slipped in the space between the metal frame and marble. If the mantel be of wood, small gilt hooks may be screwed in either side of the fireplace, and rings sewed on each corner of the upper edge of the matting. Thus it can be hung very easily.

M. E. WHITEMORE.

Card-Receiver.

IT is wonderful how many pretty and useful articles can be made at home without much expense, and when finished they add so much toward making it look bright and attractive. To make the cone "card-receiver" purchase a medium-sized wooden plaque, which must be gilded with "Williams' Liquid Gold," as it is a very durable preparation and will always retain its color. Select a pretty full brown pine-cone, and as they are selling them now in all the fancy stores one is not obliged to seek the pine woods for these pretty little gifts of nature. Tip the cone points carefully with a touch of gold, then bore four holes in the base of the cone and the same number of holes in the plaque. By running a narrow ribbon through these holes the cone and plaque can be firmly held together, and in order to give it a neat appearance at the base of the "receiver" tie a short full satin bow of three different shades, scarlet, brown and old-gold ribbons. A little scene of the pine woods painted on the plaque would be more appropriate than any other decoration.

KITTY CLOVER.



STANDARD WORK-BASKET.

Standard Work-Basket.

THOSE who have never possessed a standard work-basket cannot conceive the comfort there is to be derived from one. It is just the height to use conveniently and the basket is sure of having a safe resting-place and not in constant danger of being tipped off a chair or table.

Four bamboo canes, which can be purchased for eight or ten cents each, make a pretty and inexpensive frame, and they are fastened together securely by boring holes in them and running wires through and around them.

A shallow willow basket is fastened in the top to the canes with the wire, and a bag-like cover is made of a straight piece of silk or satin, the length of which should correspond with the circumference of the basket.

This strip is hemmed on one edge and a place for a shirr stitched in it just below the hem. Narrow satin ribbon the color of the bag is used for the shirr string. Fasten the other edge of the satin strip to the inside of the basket rim and tie a full bow of ribbon around the canes to conceal the wire. If a cover is not required, the basket can be prettily ornamented by weaving inch-wide ribbons through the openings around the rim.

The same idea as just given for the standard and basket can be carried out at still less cost, but with a little more trouble, by substituting broomsticks for the canes and a light wooden bowl for the basket. The bowl can be disguised by gluing little grains of rice and hominy on the outside, and when thoroughly dry giving it a coat of bronze; the broomsticks should have a coat of the same. Turn the silk bag inside out and tack it to the top of the bowl; in this way the tacks will be covered when the bag is turned right side out.

E. S. WELCH.

Knitted Lace.

IT often happens that the prettiest things are those that are most easily made. Knitted edging, as a rule, requires very careful counting to follow the pattern accurately, and instead of being light, pleasant work which can be picked up at any leisure moment, it becomes a task which scarcely repays for the time and labor expended on it. The following pattern is so simple and pretty that anyone who undertakes it will be pleased with the result. After knitting it once, it can be easily remembered and counting will not be necessary; for this reason it is especially adapted to the use of elderly ladies whose sight will not permit them to follow intricate patterns.

If three-threaded Saxony is used the lace will be nearly three inches deep, with points on its lower edge three-quarters of an inch deep.

Cast on nineteen stitches and knit two rows plain, then commence the first row of the pattern by taking off one stitch, knit one, t. t. o. (throw the thread over to make a stitch), narrow, t. t. o. narrow, knit *one*; then t. t. o. each time, and narrow until but two stitches remain; t. t. o. and knit these two.

Knit the second row plain.

Third row.—Take off one, knit one, t. t. o., narrow, t. t. o., narrow, knit *two*; then t. t. o. each time, and narrow until but two stitches remain; t. t. o. and knit these two.

Knit the fourth row plain.

Fifth row.—Take off one, knit one, t. t. o., narrow, t. t. o., narrow, knit *three*; then t. t. o. and narrow until but two stitches remain; t. t. o. and knit these two.

Knit the sixth row plain.

Seventh row.—Take off one, knit one, t. t. o., narrow, t. t. o., narrow, knit *four*; then t. t. o. before each stitch and narrow until only two stitches remain; t. t. o. and knit these two.

Knit the eighth row plain.

Ninth row.—Take off one, knit one, t. t. o., narrow, t. t. o., narrow, knit *five*; then t. t. o. before each stitch, and narrow until only two remain; t. t. o. and knit these two.

Knit the tenth row plain.

Eleventh row.—Take off one, knit one, t. t. o., narrow, t. t. o., narrow, knit *six*; then t. t. o. and narrow as in previous rows.

Knit the twelfth row plain.

Thirteenth row.—Take off one, knit one, t. t. o., narrow, t. t. o., narrow, knit *seven*; then t. t. o. and narrow as before.

Fourteenth row.—Slip and bind eight stitches and knit the rest plain.

This completes the pattern. Repeat it by making the fifteenth row the same as the first and so on.

As will be seen, every even row except the last one is knit plain, and every odd row is the same as the first one, with the exception that one more stitch is knit plain in each row until you have seven plain stitches. After these plain stitches in each row, bringing the thread forward at each pair of stitches as you narrow forms six diagonal rows of open work, which terminate in a point when the eight stitches are bound off with the last row of the pattern.

S. A. WRAY.

Straw cuffs, such as marketmen use, are decorated with long stitches in olive-green crewels, worked from the small end nearly across, to represent grasses and rushes. Daisies and cone-flowers are interspersed, formed of the same long stitches. Inch-wide satin ribbon, box-pleated, very full, finishes the top and bottom and thus very ornamental little baskets, hair-receivers and receptacles for various uses are formed.

Either crewel or silk may be used for "Queen Anne darned work," which is done by taking the stitches irregularly, or by leaving an equal number of threads with those on the needle in the alternate rows. Often the flowers of a design are worked in darning stitch, then outlined with a contrasting shade. A simple pattern is a border of conventionalized oak-leaves outlined in green upon unbleached linen, the ground supplied by wood-brown darned work in crewel. By way of variety to this, there is a pattern of oranges and leaves and blossoms; the outlines are done in coarse chain-stitch, and the fruit and leaves filled in with a sort of network coarsely worked in crewel.

HOUSEKEEPING.

Fried Tomatoes.

SELLECT smooth, hard tomatoes, wash and wipe but do not pare them, cut in halves crossways and lay the cut side in flour. Have some butter heating in a cup on the back of the range where it will not be hot enough to boil. After it has stood fifteen minutes there will be a clear oil on the top and a sediment at the bottom. Use this oil to fry the tomatoes, being careful not to pour in the sediment, which is the part of the butter that burns most readily. Let the butter get hot in the pan, then lay in the tomatoes, the floured side down, and watch closely that they do not burn; turn with a cake-turner as soon as brown. The skin side will not brown much. When all are done and removed to a platter put a small cup of milk in the pan with a little salt and thicken with a level teaspoonful of corn starch; let it boil up and pour it over the tomatoes. Some people prefer them without the sauce.

Indian Pudding.

One gill of yellow corn meal, one quart of milk, one-third of a cup of molasses in which is dissolved one-third of a teaspoonful of soda, one egg, a half teaspoonful of salt, a piece of butter half the size of an egg, ginger and sugar to taste. Scald the meal in half the milk, then remove from the fire and add the butter, molasses, and, when it cools a little, the egg. Add the cold milk slowly, stirring well to avoid lumps. The pudding should be almost cold when the milk is added. Bake in a moderate oven until a whey can be seen when a knife is put into

the centre. Serve warm, but not hot. In cooking, it is just the reverse of custard, which must be removed from the oven before any whey is formed, while the Indian pudding must be juicy; it will then become almost a jelly as it grows cool.

Anniversary Cake.

Two cups of powdered sugar, two-thirds of a cup of butter, one cup of milk, three cups of flour in which three small teaspoonfuls of baking powder have been sifted, and the whites of four eggs. Beat the butter to a cream, gradually add the sugar, and when thoroughly mixed stir in the cup of milk, then the flour, and last the whites of the eggs beaten to a stiff froth. The cake should be well beaten before the whites are added. Bake in layers. For the filling, take the best quality of loose raisins, seed and chop them till they will form a paste, then spread between the layers and ice the top.

An Economical Blanc Mange.

One pint of water, one-half pint of milk, two tablespoonfuls of corn starch, two eggs, one tablespoonful of white sugar and a little salt. Dissolve the corn starch in a little cold water and stir it into the boiling pint of water, then add the whites of the two eggs beaten lightly, the salt and the sugar. Cook over hot water till it thickens, then pour into a mold and set away to cool. Make a custard of the half-pint of milk and the yolks of two eggs, sweeten and flavor to taste. Serve the pudding very cold.

MRS. C. G. HERBERT.

FLORAL DECORATIONS FOR BRIDAL CAKES.

THE bridal cake is generally the most conspicuous ornament of the table, and when properly decorated with a wreath of greenery and choice white flowers, the effect is considerably enhanced. These cakes are often of great size, some even two feet through and eight inches deep. They are usually iced over and decorated with white raised ornaments or fanciful devices, and frequently have a vase in the centre with artificial flowers.

When natural flowers are used the effect is very much better; the cake is still iced over and the top ornamented, but the centre is surmounted with a silver trumpet-shaped vase filled with choice white flowers and fern fronds. Wreaths of white flowers and greenery cannot be made in the ordinary fashion, as they must be both wide and flat, and so arranged as to be easily removed. A writer in the *Garden*, London, gives the following description of the manner in which these wreaths can be arranged:

"Not having had an opportunity of closely examining one of these professionally made wreaths, I had to invent a method of forming them, which, I am pleased to say, proved a decided success. In the first place, the dimen-

sions of the cake had to be procured from the maker, and the latter on the first occasion somewhat complicated matters by giving the exact depth and circumference of the cake before it was iced over, the result being a bad fit on the part of the wreath. The next proceeding was to cut a strip of cardboard exactly the length and depth to surround the cake, and from the ironmonger's we obtained a strip of quarter-inch mesh galvanized wire netting, nothing more suitable being procurable. This was loosely secured to the cardboard with a few wire fastenings, and then laid flat on a table. It was then faced over with leaves of *Spiraea Japonica*, the stems being threaded in among the wire meshes; then followed the flowers, all pure white, with a light surfacing of fronds of maiden-hair fern. Lying flat on the table the flowers and greenery were not, nor ought to be, very tightly clasped between the wire and cardboard, but directly it was formed into the circle round the cake it was held quite tightly, and not a flower shifted out of place. It was an easy matter to fasten the two ends of the wire-netting together either by means of string or wire, and it was, as may

readily be supposed, as easily loosened. Being self-supporting, there was no necessity to entirely remove it when the cake was cut.

"One wreath that we made had a central ring of small arums, the slight intervals between them being filled with bunches of white azalea and single pips of *Stephanotis*, also wired, fringed on each side with spikes of *Spiraea japonica* and lilies-of-the-valley. The flowers were disposed rather thickly, occupying nearly the whole width of the framework, and maiden-hair fronds intermingled gave the whole a most chaste appearance. On another occasion the groundwork consisted of fronds of *Adiantum*

tenerum, and the principal flowers employed were Roman hyacinths, azaleas, paper-white narcissi, double-white primulas and *Begonia semperflorens*. If the wreath had to be sent a great distance, or had to be formed several hours before it was wanted for use, it would be advisable to place a thin layer of damp, green moss between the cardboard and the wire network. This would greatly preserve the flowers and greenery. This is unnecessary when it is made a short time before it is required; but even in this case it is a good plan to use plenty of flowers and fern fronds, as they are certain to droop somewhat."

NOTES AND COMMENTS.

The Flower Market has, since Easter, been very variable; some days New York has been overstocked with choice roses, lily-of-the-valley, and in fact everything in the way of cut-flowers, and prices were what the buyer chose to give, although for this phase of the market the wholesale dealer has a remedy—the ash-barrel, and within the last few weeks it has been a very good customer. Again, there have been many days in the meantime when there were not sufficient choice flowers to supply the demand without regard to price. In New York there is no such thing as fixed prices for flowers; the supply and demand invariably determine them. Upon the whole the growers appear perfectly satisfied with their returns, as well they might be; no business pays better.

* * *

The Society of American Florists.—If the next annual meeting is not in all respects a success, it will be very strange. Every florist whom we have met expects to attend, because of the rich treat enjoyed last year. And it is safe to say that as the last entertainment was so pleasing the attendance this year will be doubly as great. The officers of the society, too, know what is expected of them, and, taking time by the forelock, they are making such arrangements as were never before made in the way of entertaining friends. We are not prepared to say what is being done, in detail, but know enough of the management to advise all of our friends in the trade to so arrange their business matters that their presence at home will not be needed during convention week. The florists in the City of Brotherly Love are an intelligent, kind-hearted, wide-awake set, and they have taken hold of this matter with a pride and a determination that know no failure, and there will be none. It is a little too early to speak of the arrangements, as they are yet incomplete, and we only wish now to remind our friends in the trade of an engagement they have for the middle of August.

* * *

Rare Plants at Auction.—The magnificent collection of rare specimen plants that the late William Bennett, of Flatbush, N. Y., had spent so many years in collecting, and which he had loved too well to sell, are to be offered for sale at the auction rooms of Young & Elliott, New York, on June 11th. In this collection will be found some

of the most rare and best cultivated plants in this country. Those of our readers who desire to see plants in their integrity, absolutely perfect, will do well to attend this sale. There they can see what a plant's capabilities are when properly cared for. They may also expect to see plants sell for what they are worth, and we trust the prices will encourage others in the trade to grow plants equally well.

* * *

Carnations.—A correspondent describes as follows her process for rooting carnations: "I took good healthy cuttings from near the base of the plant (the blossom ends do not root readily, their vitality seems exhausted). I placed about two dozen in a large tumbler of rain-water into which I had previously dropped two drops of camphor. I let them stand in this two days, then I put them into my "cutting-box" which contained river sand with a "top-dressing" of an inch of rich soil. I inserted them quite deeply, taking care to have the base of the cuttings well heeled into the sand; then I watered the soil gently with the camphor water, and covered with glass, set where the cuttings had the full benefit of the morning sun, and in due time every "slip" rooted but two. I was careful never to let the soil become too dry under the glass, lest they should burn to death, and they set up their tiny heads with never a thought of drooping, and threw out nice strong rootlets. I planted them in good garden soil in a small box, and now, the 7th day of February, they are as healthy plants as one would wish to see, and will make strong bedding plants this spring. The cuttings were rooted the last half of August, and were just an experiment. I am satisfied they could be rooted any time of the year if proper care was taken, though of course spring is the better time, as they can be bedded out, and take less care than holding over winter. If started in spring, the earlier the better. If you wish to see blossoms that year, March is none too soon, and a cigar-box on a shelf in a sunny window, with hot bricks for bottom heat, is a great assistant to an amateur plant-grower, as I have found from many years' experience. If cuttings are small, a glass can easily be laid over. The lovely flowers are surely unequaled for their fragrance and beauty; one seldom tires of the clove-like odor." M. R. W.

Le Passiflora, *Constance Elliott*, is all that is claimed for it, a white flower and a very free bloomer. It is very like in form *P. cærulea*, its parent, and if as good, it is certainly valuable because of its color. As climbing plants all the passifloras that will bloom well out of doors are particularly desirable, because of their rare and strange beauty and their free growing, cleanly habits. For covering trellises or verandahs they have no equals.

* * *

The Massachusetts Horticultural Society offers the following special prizes for *Hybrid Perpetual Roses* at their coming rose show to be held Tuesday and Wednesday, June 22 and 23, 1886:

PRIZES.

A.—A prize valued at \$30.00, for the best twenty-four roses of different varieties, *named*. Second prize, \$15.00.

B.—A prize valued at \$10.00, for the best six roses of different varieties, *named*.

C.—A prize valued at \$15.00, for the best twelve roses of different varieties, *named*.

D.—A prize valued at \$25.00, for the best eighteen roses of different varieties, *named*.

E.—A prize valued at \$10.00, for the best six roses, of any two varieties, three of each.

F.—A prize valued at \$15.00, for the best twelve roses, of any four varieties, three of each.

G.—A prize valued at \$25.00, for the best eighteen roses, of any six varieties, three of each.

H.—A prize valued at \$15.00, for the best general display of roses grown in open culture, all classes except Hybrid and Moss.

I.—A prize valued at \$18.00, for the best and best kept design, table decoration, or combination of roses, in baskets or other receptacles excepting vases. Second prize, \$12.00.

AMATEUR'S PRIZE.

J.—A prize valued at \$30.00, for the best twenty-four named roses of different varieties, exhibited by an amateur. Second prize, \$15.00.

No person or firm can compete for more than two prizes, and any person competing for the amateur prize may duplicate varieties shown in that class in competing for other prizes.

All roses competing for these special prizes, with the exception of Prize I, must be exhibited in boxes of the dimensions named below, which will be furnished by the society on application.

Length.	Breadth.	Height.
For 24 roses, 4 ft.	1 ft. 6 in.	Back of box, 6 in.; front, 4 in.
" 12 " 2 ft. 2 in.	" "	" " " " "
" 6 " 1 ft. 6 in.	" "	" " " " "

Two boxes of 12 each will be considered as one of 24, or one of 12 and one of 6 will be considered as one of 18.

* * *

Hyacinthus candicans.—Those who require white flowers for the conservatory in the month of September may be strongly advised to grow a good stock of *Hyacinthus candicans*. It is very easy to grow in pots, and bulbs potted at once will ensure examples that will bloom most satisfactorily in the month mentioned. As it is the

most effective when several plants are grown in each pot, three bulbs should be put into six-inch and nine into eight-inch pots, the greater of the two numbers forming highly effective specimens. Any ordinary garden soil will answer very well, but a mixture of turfy loam and well-rotted manure will be the most suitable. The pots should be well drained, and as soon as the bulbs are put in them they should be plunged to the rim in a bed of coal ashes made up in a sunny position. The only attention necessary after they are put in the bed will be to supply with sufficient water to maintain the soil in a nice moist condition. If the bed occupies an exposed position it will be advisable to support the stems with a neat stake. When in full growth liquid manure of a moderate degree of strength may be substituted with advantage for the clear water. This hyacinth will be found most useful for associating with ferns, zonal pelargoniums, lilies, and, indeed, any other subjects that may be then in bloom. It must be mentioned that the large bulbs are alone suitable for pot culture.—*Gardener's Magazine*.

* * *

Tuberous-Rooted Begonias.—One of the most successful exhibitors with whom I am acquainted tells me that he finds it best to let the tubers rest all the winter in the pots in which they flowered, and that it is not desirable to repot them in the spring until the young growth has grown an inch in length. His reason for deferring the potting is, that after they have once started to grow they continue to do so, although they may have been disturbed by being fresh potted, providing the potting is not deferred too long, but if they are shaken out of the old soil before growth commences, there is a possibility of the bulbs decaying, or, at least, being weakened, especially if they are potted in damp, cold soil. At any rate, this grower appeared to be quite confident that he got a better growth by repotting after growth commenced than before. Experienced plant-growers will not be surprised at such a statement, for begonias are not the only plants which bear root disturbance much better after growth has commenced than they do before. In regard to wintering tuberous-rooted begonias, my friend finds that they keep in good condition when the pots stand on the floor of a cool house all the winter, and the pots in which his specimens are grown being ten inches in diameter, they require scarcely any water all the time they are resting; but it will not do to allow the soil to remain dust dry for more than a week together. Drip is a great enemy to these bulbs, therefore great care is necessary during the winter, when they have to be kept under plant stages, that water does not reach them from above. The same grower also showed me some bulbs about this time last year that he had covered with sulphur for the purpose of absorbing moisture, as he found that some of the tubers which had hollow crowns were damper than was good for them; this was especially the case with that beautiful single-flowered variety, Madame Stella, which had quite a hollow crown. I was assured that the application of sulphur sucked up the moisture and prevented the decay of the tuber, which must have resulted if the moisture had not been got rid of.—*Gardening Illustrated*.

Gladiolus the Bride and Milla biflora.—Gladiolus the Bride does exceedingly well in pots. Put eight bulbs in a six-inch pot early in February, and grow them on either in a greenhouse or cold-frame; any common garden soil suits them. In well-drained soils close to warm walls they frequently stand through the winter, and where they will do this, the flower-stems are much stronger than those grown in pots. It is a beautiful subject for amateurs to grow, as it is such an admirable plant when used in a cut state, as the color is the purest white, and if the spikes are cut just when the first flower opens, all the others will open if the stems are placed in water and kept in a warm room. We grow the principal part of our stock in the mixed borders, and plant out the bulbs early in March, and lift them again in September. During the winter we keep the bulbs in flower-pots in a cool place, from which the frost is excluded. *Milla biflora* is more tender than the gladiolus. It may be grown in pots, but it succeeds best planted out in the open. We plant early in April, in a warm and sheltered bed, where the soil is fairly light and rich, as both the leaves and the flower-stems are weak. They should have a position quite apart from anything else. Strong bulbs will begin to flower at the end of June, and will continue to do so until the middle of October. As the bulbs must not be exposed to severe frost, they should be lifted early in November, and, when dried, placed in an empty seed-pan and covered with dry soil, as I find if the air reaches them the bulbs shrivel. I am very glad to see inquiries made about this beautiful bulbous plant, as I consider it the most lovely of all half-hardy white flowering bulbs, and seeing how easily it is grown, no one need hesitate to undertake its cultivation.—*J. C. C., in The Garden.*

* * *

Study Nature.—All our perennials have winter states which are full of interest to the student. The writer of this note has taken classes of young people, who knew nothing of botany, and set them at work in midwinter studying the out-of-door vegetation, with nothing but their eyes, pocket-knives, pencils and note-books in the way of apparatus and helps. The structure, position and functions of buds, the structure of twigs and branches, including wood, bark and pith, the structure of the fruits and seeds of various trees and shrubs, were taken up in succession, with constantly increasing interest. No text-book was used, the pupil depending upon his own resources entirely. By the time that spring came with its bursting buds, its leaves and its flowers, these trained young eyes were eager for their study.—*American Naturalist.*

* * *

Mountain Pink.—One of the most cheering evidences of spring is a mass of *Phlox subulata*, in full bloom. Taking advantage of the well-known character of this hardy little native plant, it is grown on dry, thoroughly drained places, but may be cultivated in almost any garden spot. A noted English botanist once remarked when admiring a large mass of this beautiful species: "A sight such as this well repays one for a trip across the Atlantic." On an artificial rockery in the full sun it is seen at its best.

Choice Annuals.—Personal taste must, in a measure, govern selections, but there are a few whose claims none may ignore. For dwarf bedding *Phlox drummondii* and *portulacca* are indispensable, easily cared for and certain in their results. Balsams or lady's-slippers are easily cultivated and abundant bloomers. California poppies, or *eschscholtzia*, will give a profusion of yellow or white flowers all summer. The marigolds, old-fashioned as they are, are very free bloomers and succeed with little care. A little *mignonette* must always have a place on account of its fragrance. Double zinnias, although coarse in growth, make a fine show of various tints.

* * *

Callas.—We have no more valuable plant with white flowers for bold decorations than the well-known *Calla athiopica*, and its merits are now generally acknowledged. My object in penning this note is not to praise the calla, or to give a complete treatise on its culture, but simply to refer to one or two points requiring special attention. In the first place, to have the flowers in full perfection, the plants must not at any time suffer from drought. It is a good rule also to plant callas out on a south border when they have done flowering, and in the case of those forced into bloom early in the year as soon afterward as it can be done with safety. After they are planted out they must occasionally receive a supply of rather weak liquid manure. Once a week will perhaps be often enough. During the summer, when the weather is hot and dry, they must be watered overhead with a can to which a coarse rose has been affixed, the evening being the best time for the overhead watering. The last week of September is the best time to lift the stools, which must be put in pots of comparatively large size, with a rich compost, and placed where they will be safe from frost.—*Gardener's Magazine.*

* * *

Missouri State Horticultural Society.—The summer meeting of this society will be held at Louisiana, Mo., June 8 and 9.

* * *

The Audubon Society.—Statistics are as yet wanting to show the proportions to which the destruction of small birds has grown in North America, but we know that it reaches well into the hundreds of thousands. Some figures published in August, 1884, showed that in a three-months' trip a single taxidermist collected bird-skins to the number of 11,018, which, including specimens too badly mutilated for preservation, and skins spoiled in the making, would perhaps represent a destruction of 15,000 birds. This same person states that he handles annually about 30,000 bird skins, almost all of which are used for millinery purposes. A single middleman who collected the spoils of the shooters in one small district brought to the taxidermist's in four months about 70,000 birds.

How can we best go to work to combat this great and growing evil, what means can we best employ to awaken at once popular feeling against it?

The formation of an association is proposed for the protection of wild birds and their eggs, which shall be called the Audubon Society. Its membership is to be

free to everyone who is willing to lend a helping hand in forwarding the objects for which it is formed. These objects shall be to prevent, so far as possible (1), the killing of any wild birds not used for food; (2) the destruction of nests or eggs of any wild bird, and (3) the wearing of feathers as ornaments or trimming for dress.

Those who are willing to aid in the labors are urged to establish local societies for work in their own neighborhood. To such branch societies will be sent without charge circulars and printed information for distribution among their neighbors.

The work to be done by the Audubon Society will be auxiliary to that undertaken by the Committee of the American Ornithologists' Union; and will further the efforts of the A. O. U. committee, doing detail duty to which they cannot attend. Those who desire to join the Audubon Society, established on the basis and for the purpose above set forth, should send their names at once to the *Forest and Stream*, 40 Park row, New York.

Books, &c., Received.

THE *Horticulturist and Farm Journal*. Another new comer whose objects are "to look after the

interests of farmers—the men who plant, sow and harvest; the men who chop down the trees, deaden them, if you please, plant a hill of corn there, scratch 'round the stumps of dead trees and sow wheat or buckwheat—those who grow animals for the use of the race. These are the men for whose interests this paper is established." This is an important field to work in, and one in which many such laborers are required. No. 1 is a very creditable paper, and filled with useful information for every farmer. Published at Warren, Ohio, at fifty cents per year.

Hooper's Gardening Guide.—Hooper & Co., London, De Veer & Boomkamp, agents, Broadway, New York, 300 pages, by mail \$1.10. This book has been produced to supply a long-felt want, a concise and plain dictionary of gardening, something within the reach of all and something that all can understand and master with but little thought and trouble. It contains a list of all desirable plants for the garden, greenhouse and conservatory, also for the kitchen-garden. It is fully illustrated and complete in cultural instructions. Many of its hints on culture are not wholly applicable to our climate, and due allowance must therefore be made for these differences, as there must be between the different sections of our own country.

ANSWERS TO CORRESPONDENTS.

Ivy—Mrs. A. Bonner, Washington Territory.—We cannot attempt to say what plant is hardy with you; we are too far off. The ivy is hardy when the temperature does not fall below zero, or twenty degrees below, providing it is on the shady side of the house.

Cactus—Same.—The name includes, in popular estimation, all the various species referred by botanists to *Coreus*, *Epiphyllum*, *Echinocactus*, *Echinopsis*, *Mammillaria* and *Melocactus*, under which genera their several peculiarities are noticed. Of these several genera there are hundreds of species, and of the species many varieties, and each variety is frequently known by several different popular names.

EDITOR FLORAL CABINET:

A friend of mine wishes to know the name of a tree that she has seen blossom in Brooklyn, N. Y. The tree resembles an evergreen, but is as graceful as an elm, and each branch seems to be tipped for about an inch with pink blossoms.

E. C. HOPKINS, Mich.

[Your friend probably refers to the *Tamarix Gallica*, a shrub that will thrive in almost any soil or situation; in bleak, exposed places on the sea-coast, in the poorest sandy soils, it never fails to succeed and produce its long, terminal, graceful spikes of pinkish flowers. It will do equally well in city yards that are exposed to the sun, soot and smoke. It is, in short, one of the most valuable ornamental shrubs. A variety of this, or an allied species, produces in Arabia a substance considered by the Bedouins a great dainty, and called by them *mann*, or *manna*, from its outward resemblance to the manna

of Scripture. In the month of June it drops from the branches upon the fallen leaves and twigs, which always cover the ground beneath the tree, and, being collected and cleaned, is eaten with bread.]

Soil for Lily of the Valley.—Mrs. Dr. Roberts.—These lovely plants grow wonderfully well almost everywhere, in sun or in shade, but a partially shaded situation suits them best. The soil best adapted to them is a lively loam, but they thrive admirably in a stiff clay, and we have seen them do well in a light, sandy soil, but in such a one the spikes of bloom will not be as long, neither will the bells be as large. In forcing them but little soil is used; frequently not any, the pips being simply put in boxes of moss, closely packed.

Green Fly (Aphis)—Mrs. A. P. Bradley.—This is the most common of greenhouse pests, and is still more annoying in the conservatory or window-garden, as they are more difficult to exterminate. Tobacco in almost any form will destroy them. In the greenhouse they were formerly destroyed by fumigation, but more recently it has been found that by putting tobacco stems on the soil around the plants it is just as effective and with much less trouble. It is a good plan to syringe the plants thoroughly with strong tobacco-water every morning, after which rinse them with clear water.

Old Man Cactus—*Cereus senilis*.—Mrs. A. Bowen.—The calycanthus is what is popularly known as the sweet-scented shrub.

NEWSPAPER WAIFS.

—In answer to Joe Cook's question: "Is life worth living?" we reply that it all depends on the liver.—*Puck*.

—Some one says a beau on a girl's arm is worth two on her hat. That depends on how tight it is tied.—*Baltimore News*.

—More Marital Amenities. He—"If you had the sense of a donkey you would listen to me." She—"I fear I should, my dear."—*Harper's Bazar*.

—"What is the first step toward securing a divorce?" asked a client of a Philadelphia lawyer. "Get married," was the prompt reply.—*Philadelphia Herald*.

—The Smith College girls have organized a society for the protection of birds. The larks of the young gentlemen will receive their first attention.—*Burlington Free Press*.

—Yes, my son, the husband is conventionally the head of the family; but it may be worth remarking that some families are constructed on the pyramidal fashion—the most insignificant part at the top.

—An Illinois goat climbed upon a portico, and seeing its reflection in one of the windows, stepped back and then dashed at it, demolishing the thick plate glass. He could not bear uncomplimentary reflections so well as some people can.

—Salesman—"Shall we send the package c.o.d., madam?" Mrs. O'Brien—"Divil may Oi care phether yez send it c-o-d, or c-o-w, so long as Oi recave it to-morrow mornin'." O'Brien (who has just struck an Aqueduct contract)—"Whist, Mary Ann! Ax the young gentleman how thim Vandherbilts an' Ashtures gits theirs. We'll have it sint in the sem way, so we will."—*Judge*.

A CHANGE OF AIR.

Change of air and scene is desirable for all, for many reasons, as it tones up the bodily powers and gives a buoyancy to the spirit that transforms toil from a drudgery to a pleasure. It clears away the mists and clouds from the mind and allows life to be seen in its true light and brightness.

One of the ills for which a change of air has usually been found the most effective method of relief is hay-fever. But many of those who suffer from this ailment cannot go from home to secure it. They want a different form of relief at home, this is happily furnished by the Compound Oxygen treatment. Within the past year reports of cures or a large measure of relief by this treatment have been made by patients in Maine, Massachusetts, New York, New Jersey, Pennsylvania, Maryland, Virginia, North Carolina, Ohio, Michigan, Missouri and Kansas. These will be of interest to anyone who has ever suffered from hay-fever, and also to others whose ills may be relieved by similar treatment. We give herewith a few of them:

From a patient of Pittston, Me., September 24, 1885: "Since writing last I have had no hay-fever; the few symptoms I have had have passed away. The Oxygen treatment I consider a wonderful discovery. I hope you will reap a rich reward for the same."

From a patient at Hightstown, N. J., September 23, 1885: "I have been for the first time in ten years, I believe, free from hay-fever."

From Rev. T. J. Taylor, Warrenton, N. C., October 21, 1885: "Some time in August I ordered a treatment of Oxygen for my aunt. She has suffered with hay-fever regularly every year for fifteen years. When I ordered the Compound Oxygen her annual attack of hay-fever had already commenced, and, as you did not promise relief after the commencement of the attack, we were not very hopeful. But, to our astonishment and joy, the Oxygen relieved her at once, and only on one evening after she commenced the treatment, and then only for a few hours, did she have any considerable trouble with her hay-fever. Though she really had hay-fever, it was so slight after she commenced using the Oxygen that she was scarcely conscious of it. I do not know what Compound Oxygen will do for hay-fever in general, but this case of fifteen years' standing was mastered by it. You are at liberty to use this in any way you may see proper, for the good of hay-fever

victims. I believe it will cure hay-fever. It did in this case, at any rate."

To be reasonably sure of success, treatment should be commenced long enough before the expected invasion of the disease to have taken one full supply of Compound Oxygen, or two months. By this means the system can be strengthened, so that the lining membranes of the air passages will no longer be susceptible to the disease.

The above reports sufficiently indicate the potency of the Compound Oxygen in the relief of hay-fever, but that is only one of the forms of disease which yield to it. If you are suffering from consumption, catarrh, or asthma, you do not need to leave home and its comforts for Colorado or Florida. Send for the Compound Oxygen Treatment. It will do as much for you as any change of climate. In a recent letter from Hon. William D. Kelley, introducing a friend, a resident of our city, whom he had persuaded to give Compound Oxygen a trial, he says: "His physicians advised him to go to a better climate; but his means will not permit this, and I know that the climate of Philadelphia, improved by your Compound Oxygen, will do him more good than a removal to any climate on this continent; and in saying this I speak from my own large experience in California, Florida, and in the elevated plains of the country."

Compound Oxygen, its mode of action and results, a treatise of nearly two hundred pages, giving full and interesting information, is mailed to every applicant by Drs. Starkey & Palen, 1529 Arch street, Philadelphia, Pa.

They will also send free a monograph on hay-fever.

The weather which we have had so far this season has been not only very hard upon the health of many people, but ruinous to the shoes of more. To the latter we would recommend the use of Buiton's Raven Gloss Shoe Dressing, which softens and preserves the leather and makes old shoes look new. It is economical, and has been recommended by shoe dealers to such an extent that there are many imitations on the market. But do not be misled, ask for the best and get it.

WORK AT HOME.

The Women's Educational and Industrial Union, of Boston, Mass., cautions all women to be wary of advertisements and circulars promising, on receipt of a certain sum, work at home, with large earnings. We are receiving letters from women far and near who have been defrauded by these promises. Either the person forwarding the money gets no answer at all, or the materials and implements sent are of little worth, or the finished work is rejected, even if well done, or other obstacles are placed in the way (the object being simply to get rid of her). The parties advertising make frequent changes of name and address, with some difference in circulars. They are now sending out through the United States, Canada and the Provinces, hundreds of thousands of plausible circulars, well calculated to deceive, for not many of the hundreds of thousands of women receiving them are aware that by a single advertisement any city firm can get plenty of workers close at hand.

Learning that this evil can best be checked by enlightening the public, the following notice is given:

"The Women's Educational and Industrial Union, 74 Boylston street, will gladly give information regarding circulars and advertisements offering to women work at home."

It is earnestly desired that women's associations, variously located, join us in this work, and by suitable advertising make themselves known as centres of information. Any needed assistance from us will be gladly rendered. Individuals can aid by procuring the insertion of this article in their local papers.

Such general concurrence of effort will save multitudes of women from sorrow and loss, work effectively against the swindlers and promote the interests of the honest advertisers.

MRS. ABBY MORTON DIAZ,

President Women's E. and I. Union.

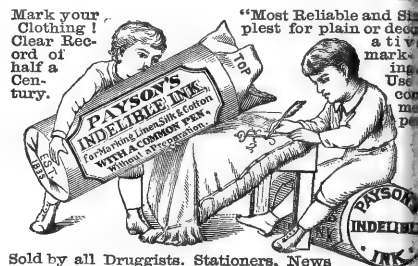
Address letters to our Employment Department.

PROF. FOREMUS ON TOILET SOAPS.

"You have demonstrated that a perfectly pure soap may be made. I, therefore, cordially commend to ladies and to the community in general the employment of your pure 'La Belle' toilet soap over any adulterated article."



Is made from the choicest quality of stock, and contains a LARGE PERCENTAGE of GLYCERINE; therefore it is specially adapted for Toilet, Bath and Infants.



Sold by all Druggists, Stationers, News and Fancy Goods dealers.

ADVERTISERS can learn the exact cost of any proposed line of advertising in American papers by addressing Geo. P. Rowell & Co.

Newspaper Advertising Bureau,
10 Spruce St., New York.
Send 10cts. for 100-Page Pamphlet

FREE! Send us your address and receive by express, free of charge, a trial bottle of **HAIR DYE** that will not stain the skin. W. L. HOWARD & CO., Chicago, Illinois.

—Dangers of cremation.—Fond wife: "My husband's ashes ready?"

Dr. Fake (hesitating).—"Well, yes—ah—hem—believe so."

Fond wife (surprised).—"Why! Don't know?"

Dr. Fake.—"Well, the fact is, we've had such a rush of business lately that I got the ashes mixed up. However, there are several urns, so take your choice."—*Chicago Rambler*.

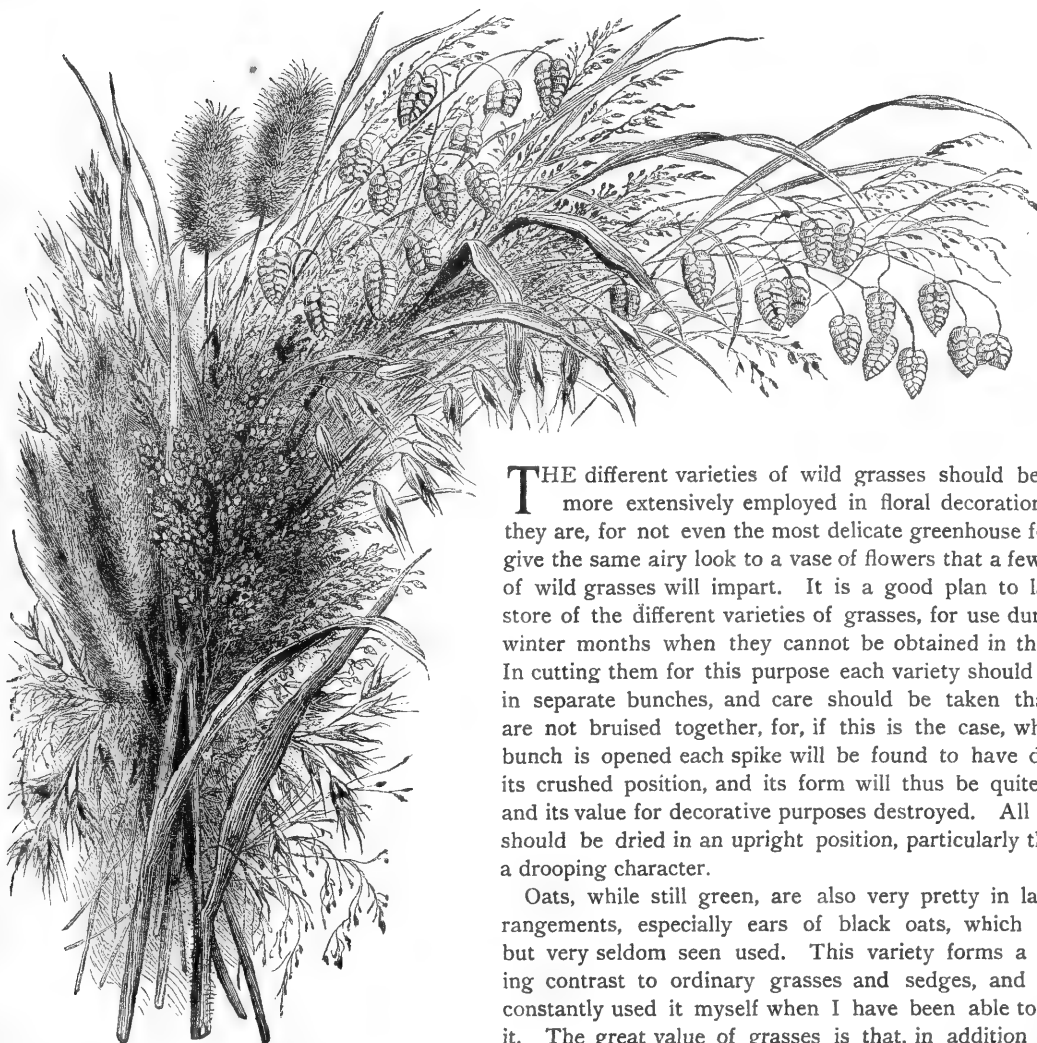
LADIES' FLORAL CABINET.

Volume XV.

JULY, 1886.

No. 7.

WILD GRASSES FOR HOUSE DECORATION.



THE different varieties of wild grasses should be much more extensively employed in floral decorations than they are, for not even the most delicate greenhouse fern will give the same airy look to a vase of flowers that a few spikes of wild grasses will impart. It is a good plan to lay in a store of the different varieties of grasses, for use during the winter months when they cannot be obtained in the fields. In cutting them for this purpose each variety should be tied in separate bunches, and care should be taken that they are not bruised together, for, if this is the case, when the bunch is opened each spike will be found to have dried in its crushed position, and its form will thus be quite spoilt, and its value for decorative purposes destroyed. All grasses should be dried in an upright position, particularly those of a drooping character.

Oats, while still green, are also very pretty in large arrangements, especially ears of black oats, which I have but very seldom seen used. This variety forms a charming contrast to ordinary grasses and sedges, and I have constantly used it myself when I have been able to obtain it. The great value of grasses is that, in addition to giving

a light appearance to a vase, a large plume of handsome grasses and sedges enables us to dispense with many flowers. To some this may be no object, but to many it must be a matter for consideration. My attention has been directed to the usefulness of the bloom of the Ribbon-grass for mingling with flowers, and I can bear testimony to its utility for this purpose. The bloom has a silver-like lustre in some stages of its growth, while in others it assumes a rosy-pink tint, which is equally pretty. In the trumpet of a March vase, which has been dressed

with pink and white flowers, a few spikes of the Ribbon-grass bloom help to carry up the color with charming effect into the green of the other grasses, flowers and foliage employed in its decoration. For a trumpet vase the graceful drooping oat-grass is best adapted. The common horse-tail is also not to be passed over, as it, like the grasses, forms a valuable addition to floral decorations, and may be found growing in moist places in country lanes or on sandbanks by the sea. In Devonshire it is to be found in most lanes, while about Hythe, in Kent, it is very plentiful along the coast.—A. H., in *Gardening Illustrated*.

[We would say that, in addition to the wild grasses of an ornamental character, so abundant in our country, may be added the plumes of the *Eulalia Japonica variegata*. These, in combination with the plumes of the *Scirpus maritimus* (Sea club-rush), make one of the most pleasing bouquets we have ever seen in the way of dried grasses. Bouquets of dried grasses are rarely appreciated, because they are rarely arranged with any degree of taste. Too many kinds are employed in one design, and not unfrequently artificially-colored grasses, which are an abomination, are used.—ED.]

PLANT NOMENCLATURE.

THE Kansas Legislature has made it a misdemeanor punishable by fine or imprisonment for persons to misrepresent, deceive or defraud any person or persons in the sale of fruit, shade or ornamental tree or trees. The same penalties apply to any persons who deceive in relation to any vine, shrub, plant, bulb or root, by substituting inferior or different varieties; or who shall falsely represent the name, age or class of any such fruit, shade or ornamental tree or trees, or any vine, shrub, plant, bulb or root.

What have the nurserymen and florists of Kansas been doing that such an enactment has become necessary? Are they guilty of moral turpitude and the seedsmen not? Usually the two industries work together, and are alike responsible for the injuries inflicted upon suffering humanity, injuries that are now to be estimated by twelve men good and true. Undoubtedly the buyers of trees and plants have been imposed upon to an alarming extent, and a tree swindle, if the tree is a fruit tree, is the meanest of all swindles, for the reason that it takes so long to recover from it. Besides, the want of confidence in the nurserymen prevents very many from planting that would otherwise have large orchards of valuable fruit. At this point we wish to say one word, and that most emphatically, and that is, from our experience and dealings with nurserymen, and our dealings have been quite extensive, and to that we will add our observations, which have been keen and broad, yet we have never known a dishonest nurseryman, one that would intentionally send out a tree not true to name and description. As a class nurserymen are men of more than ordinary intelligence, and as such they know the commercial value of a good reputation too well to sacrifice it, and ruin their business by sending out an inferior tree, or one that was not ordered.

We wish now to speak of another class of men, viz., tree peddlers. No, we won't; the ice is too thin to be safe. If our readers wish to buy trees, buy direct from the nurseries, thereby saving money and disappointment.

The law in question will, if enforced, make sad work with the florist, for without putting a new name to some old plant, "novelties" would be rare, and without them there would be but little profit in the business. Besides,

who can say that the name the florist gives is not the correct one, unless botanical names are insisted upon, and then what shall be done with variety names, names that the botanist ignores? And what shall be done with the popular names which distract the skilled florist? For instance, there is not a florist in the land but what has had inquiries for a *Lady Washington Geranium*, when there is not now, neither has there ever been, any such plant. The name was given many years ago to a variety of the large flowering or fancy pelargoniums. This name, by common consent, has become so general as to be used in a generic sense. If a plant or tree is ordered and the popular name only given, what is the florist to do in order to escape the penalty, if through ignorance or accident a mistake occurs? Suppose a customer should ask for a tuberous-rooted wistaria, a plant that does not exist in the botanical field, although commonly advertised. The florist will naturally suppose his customer will want what is sold for the plant ordered and send a tuber of the *Apios tuberosa*. When the plant makes its appearance above ground, which it will do quite early, the customer finds, to his regret, that he has a plant common to the moist places of his farm and one that bears as little resemblance to a wistaria as a bean does to a briar. He would naturally be indignant and marvel at the florist's wickedness or stupidity; and, if of a litigious turn of mind and a resident of Kansas, he would at once seek redress through the court, a judge and twelve of his peers.

Again, suppose a man wanted a white, large-flowering syringa, and sent a carefully-written order, one showing more than an ordinary degree of intelligence in the writer, to a nurseryman of good repute. He would in return very likely or possibly get a white lilac, which is the popular name of the syringa. He would get exceedingly provoked, if not very, very mad, as he wanted a plant which is popularly known as syringa, which is nothing like a legitimate syringa, the botanical name of which is *Philadelphus*. These are the two shrubs most commonly met in parks and on lawns, yet it is safe to say that not one in a hundred that cultivate and admire them know their true names. Now, we think it would be rather severe, under the circumstances, for a Kansas jury to con-

vict a florist upon the charge of misdemeanor, for sending a man a liliac when he ordered a syringa.

Common or popular names of plants often lead to mistakes that cause a vast amount of trouble and disappointment. In one locality a plant is called by one name, and in another the same local name is applied to quite a different genus. In our early gardening operations bachelor's button was a name applied to the *Centaurea cyanus*. Now, the same name is applied commonly to the *Gomphrena globosa*, or globe amaranth, and to various other button-shaped flowers. We only refer to this to show how easy it is to be mistaken, and to show how much trouble slight mistakes sometimes cause. The confusion arising from the application of local names is most generally of an amusing rather than of a serious character. But the alteration of variety names, and the substitution of one variety when another is ordered, which is, we regret to say, a very common practice, is one that justly deserves some practical form of punishment. We have had our attention called to several instances where fifty distinct varieties of a certain class of bulbs were ordered, and the order was filled from a stock of twenty-

five varieties. The parties to whom the order was sent would say to the clerk who was putting the order up: "Never mind if we have not got half the varieties ordered; substitute others with such descriptions that come the nearest to the ones given; they can never tell the difference." But they can, and do know better; and in many instances they forever boycott, as they should do, the dealer that deceives them. Our correspondent, F. Lance, has given his testimony in a way not to be mistaken as regards roses and their synonyms, and the way in which respectable (?) dealers fill their orders. Now, what is true of roses is also true of most other plants. We have every reason to know that, when stocks are low at many of our nurseries, verbena, dahlia, lily and gladiolus orders are filled in the same manner as the bulb order referred to, the dealer assuming the customers do not know what they order, or are unmindful of what they get. There is such a thing as confiding too much upon the credulity of the customer, and the day is not far distant when the most successful florist will be the one that not only knows what he sells, but sells only such plants as he knows are true to name and description.

CAMBRIDGE BOTANIC GARDEN.

PROBABLY all our readers have heard of Harvard College and Professor Asa Gray, America's greatest botanist, but few know of the botanic gardens connected with and under the auspices of this institution.

To the left, on entering the grounds, stands Dr. Gray's home, one of those plain, old-fashioned, square houses so common in the olden time. Just beyond and connected is a low fireproof edifice which contains the great Herbarium of the North America Flora, where are stored so many of the first specimens of American plants, here first given a name and a position in the vegetable world. Here the weeds and the most gorgeous flowering plants all stand on an equal footing; they are all dried specimens on sheets of paper, with a botanical name and character: the most insignificant plant may be the rarest, and the finest flower the commonest among them.

Beyond the Herbarium buildings are the greenhouses and conservatories filled to overflowing with tropical plants in great variety.

Mr. Manda, the gardener in charge, is a great admirer of the orchids, and is especially interested in the cypripediums, of which he has a fine collection and several valuable hybrids. Of his own raising of cypripediums there are over forty species and varieties. Among them the following rare hybrids: Maulei, Chautei, Sedeni, Harrisii, Domine, Ashburtonia, Euryandrum, Superciliare and Vesillarium.

There are well-grown specimens of nearly all the leading varieties of Catalpas, Lælias and Dendrobiums; of the last two hybrids, Splendidissima and Ainsworthii, are valuable.

There are always many orchids in bloom, and at this

visit was noticed several cypripediums, lælias, anceps and superbeus, Lycaste, Skinnerii, Zygopetalum, Mackarii and others.

There are in the houses about four hundred and fifty species and varieties of ferns, including forty-five adiantums.

In one end of a narrow house formerly filled with ferns is a grotto kept constantly moist, and here are specimens of the magnificent Australian *Todea superba*, *Lematophylla* and *Fraserii*, and *Hematophyllum dissectum*. The surface of the rocks is coated with the native *Trichomanes radicans* and *Selaginella apus*. This house is the simplest but one of the most useful of the set; it is formed of two brick walls about five feet apart, roofed with movable sash. Along one side are three shelves; under them, on the ground, are stored tender roots and bulbs. On the first shelf pans of seed starting into growth; on the second shelf plants being forced into growth and flower for use in the classes of botany of the university; on the shelf next the glass are dormant orchids being forced into growth. It is very instructive to see the great amount of space utilized in so inexpensive a house.

In other houses is a large miscellaneous collection of tender and half hardy plants, many very charming and interesting in flower and foliage, others of botanical interest only. In one house is a very fine collection of succulents, including a large number of native cacti; in another house a collection of economic and Biblical plants of great interest and instruction to all. Here may be seen the cinchona, coffee, wild orange, fig and olive, the pepper and cinnamon trees; the sycamore of Scripture, the palm, from which palm hats and fans are made; the

guava, bread-fruit and cow trees, the cotton and tea plants, the tamarind and sugar-cane.

In the centre of the garden is a round pond, bright in summer with aquatics. The beds are arranged in circles parallel with the pond, alternating with broad bands of grass, and intersected by cross-paths; there are beds of low shrubs near the centre leading to groups of larger shrubs, and small trees gradually rising and carrying the eye to the tall trees on the outskirts.

Among these trees and shrubs are noble specimens of the Cordate Magnolia (*Magnolia cordata*), Round-leaved Maple (*Acer circinatum*), Yellow Wood (*Virgilia lutea*), Kentucky Coffee Tree (*Gymnocladus Canadensis*), American Persimmon (*Diospyros Virginiana*), a row of magnificent white beech (*Fagus ferruginea*), a perfect specimen of the Colorado Blue Spruce (*Picea pungens*), *Rubus deliciosus*, with very beautiful white flowers in spring, and many other rare native and foreign shrubs.

In retired spots in the ground are rockeries filled in summer with a choice collection of plants, and they are a source of great pleasure to every visitor, for there is in them such a variety that there are abundant flowers at any time a visit is made, and no matter how often they are looked over there is always something new to see.

In the beds are many typical plants, the parents of our garden flowers, arranged in a systematic way with those related to them. A day's study at any time during the summer is of the greatest value to the gardener or the amateur flower grower.

In a protected situation near the greenhouses are the cold-frames filled in winter with plants ready to be placed in the garden in the spring; but one long frame contains treasures—the gems of the floral world gathered from the high Alpine slopes and given here conditions suited to their growth.

Here is the famed Edelweis, the Alpine gentians with their wonderful blues, the saxifrages, with little tufts of

pretty leaves and bright and charming flowers, and a host of others only to be seen to be admired.

A few steps from the frames is the American Wild Garden. It is a work of about two years, but already it is one of the most interesting spots in the ground. The land, originally level, has been made into gentle slopes, steep rises and banks, a spring with a rill of water finding its way along the rocky bed to a pool below that is filled with aquatics, and the edges lined with marsh plants; convenient paths run in all directions through the garden. The grounds are arranged to supply, as far as possible, in so limited a space, all the conditions found in nature, and it is proposed to grow here all the native shrubs and herbaceous plants that are of interest. Already many hundred kinds are introduced, and the place is full of attraction throughout the season. It cannot fail to be the most attractive feature in the grounds, and would draw a host of admirers if it was known that so much of interest and beauty was there.

Cambridge is full of places of historic and scientific interest, and the Botanic Garden is by no means the least of these. Every one who loves flowers should visit it, and see what opportunity there is to study plants and flowers in all their forms.

This garden and that equally as interesting and instructive institution, the Arnold Arboretum, in Jamaica Plains, where all hardy trees and shrubs may be studied, are under the direction of Prof. Charles S. Sargent, and too much credit cannot be given to this eminent scientist for the work he has done and is doing in organizing and carrying on these establishments under many disadvantages, not the least of which is a lack of the necessary funds for enlarging and improving the facilities.

One who carries on such institutions successfully is a public benefactor, and his work will form a record for coming years that he may well look forward to with pride.

WARREN H. MANNING.

WINDOW-GARDENING IN JAPAN.

AN old friend of mine who has traveled among the Japanese tells me that their love of flowers and young plants is in reality an absorbing passion. In the smallest of dwellings there is an altar-like niche, in or upon which flowering plants are arranged, but they have in some districts a most remarkable custom in connection with window-gardening, which I will describe to you. In houses wherein reside one or more daughters of a marriageable age, an empty flower-pot, of an ornamental character, is encircled by a ring, and suspended from the window or verandah by three light chains. Now, the Julietts of Japan are, of course, attractive, and their Romeos as love-sick as those of other lands. But instead

of serenades by moonlight and other delicate ways of making an impression, it is etiquette for the Japanese lover to approach the dwelling of his lady bearing some choice plant in his hand, which he boldly, but, let us hope, reverently, proceeds to plant in the empty vase. This takes place at a time when he is fully assured that both mother and daughter are at home, and I need scarcely say that neither of them is at all conscious that the young man is taking such a liberty with the flower-pot outside the window. It is believed that a young lover so engaged has never been seen by his lady or by her mamma in this act of sacrilege; at any rate, my friend tells me that during his long residence in Japan he never

heard of anyone being detected in the act or interfered with in any way. The fact is, this act of placing a pretty plant into the empty flower-pot is equivalent to a formal proposal to the young lady who dwells within. The youthful gardener, having settled his plant to his mind, retires, and the lady is free to act as she pleases. If he is the right man, she takes every care of his gift, waters it, and tends it carefully with her own hands, that

all the world may see and know that the donor is accepted as a suitor. But if he is not a favorite, or if stern parents object, the plant is removed from the vase, and the next morning finds it withered on the verandah or on the path below. In a word, if you are not the right man, it is quite evident that this phase of window-gardening must be a difficult and disappointing one to carry on in Japan.

F. W. BURBRIDGE.

IN MEMORIAM.

AMONG our few national holidays Decoration Day possesses a peculiar significance with its mingling of sadness and sentiment. It displays to the full our national love for floral souvenirs which Dickens so pleasantly comments on in the "Uncommercial Traveler." He says we inherit that same love for flowers from the Spaniards who called our sunny peninsula "Florida," and in their spirit we mark every occasion of joy or sadness with a wilderness of fragrance and bloom. Decoration Day offers a fine outlet for this feeling, nor is it confined solely to our heroes' graves. Everything is more or less decorated; we recall the passenger locomotives on a nearby railway which were very gorgeous on this day. The cowcatcher was draped with ferns and cranesbill, a heavy wreath of azaleas backed with dogwood surrounded the headlight, and the same flowers repeated the effect above the driving-wheels. The stout engineer did not look like an æsthetic in his armor of coal dust and grease on a foundation of blue jean, but the taste and sentiment he displayed did equal credit to his head and heart, as Mr. Toots says.

It was for the purpose of studying this decorative sentiment that the writer undertook a pious pilgrimage to Riverside Park, to view the nation's tributes to our silent soldier. It is quite a pilgrimage too, even to a New Yorker, journeying to those classic haunts made memorable by brave Anthony Van Corlear.

Riverside Park is very much improved this season; it has lost its howling wilderness aspect, and it is very impressive, with the beautiful river prospect stretching away to the northwest of its two lonely tombs. The grounds were well sprinkled with sightseers, and the memorable tomb was always surrounded by a quiet and reverent-mannered crowd.

The tomb itself was almost concealed by flowers; the iron gates massed with laurel. Around the archway were the words "Faithful unto Death," the letters about a foot high, made of starry everlastings. At the top of the arch was a large white cross; behind the cross was a large floral dove.

In front of the gate was a very well-made cannon of white immortelles, on a carriage of ivy leaves; perched near the muzzle was a snowy dove. Everywhere were great bunches of callas and gladioli.

Florida sent as her tribute a large white oleander in a

tub, and far-off Bermuda sent two tubs of *Cycas revoluta*; but most pathetic of all was a living evergreen from R. E. Lee Camp of Confederate veterans. It was planted in a gray tub, banded with blue, and bearing the legend, "Let us have Peace."

The largest and handsomest floral design was a life-size war-horse, from Lyon Post, G. A. R., of Oakland, Cal. Originally it was surmounted by a rider, but the latter was so badly hurt in transportation that it had to be removed. The horse's tail was made very effectively of pampas plumes.

Looking between the bars of the gate one could see inside the tomb a mass of ferns and palm and laurel, forming the hero's bed. On the left side of the gate, outside, was a scroll of white, bearing, in purple immortelles, the word "Peace." On the right side was a similar scroll with the word "Finis." These, together with the cannon and the draping around the face of the tomb, were the gift of ladies connected with U. S. Grant Post, No. 327, G. A. R.

On one side stood a chair of crimson roses and white immortelles, the gift of the Grant Guards, consisting of the colored men who led the horses attached to the catafalque at the funeral. A handsome cushion, bearing two crossed swords encircled by a laurel wreath, was the gift of Señor Romero, the Mexican Minister. The designs coming from a distance were for the most part immortelles, those from California being a notable exception; this ever-blooming State sent a whole car-load of flowers, noticeably quantities of superb callas. These designs were for the most part effective, without possessing the grace of natural flowers; in fact, in several conspicuous cases the color and combination were calculated to give the observer a pain in the eye.

The contribution of George Meade Post, of Philadelphia, was a square piece, having a frame of red and white flowers in stripes. At each corner was a blue square with a white star in the centre. This frame inclosed a field of green, bearing the monogram, "G. A. R.," in red, white and blue; beneath this were the words: "In Memory of our Comrade, U. S. Grant," in yellow immortelles. Below Meade Post's gift was a pillow of natural flowers, from pupils of the Sacramento Grammar-School. Ranged in front were almost innumerable wreaths and shields from different States and Territories. The most elaborate and

in many respects the handsomest piece in the whole collection was from U. S. Grant Post, of Bay City, Mich. It was about seven feet square. On each side was a white barred trellis, bearing the names, Five Forks, Donelson, Vicksburg, Petersburg, Weldon, Chattanooga and Shiloh. On a blue scroll surmounted by a white dove was the word "Peace." Below this was Mount McGregor in green immortelles, while around this was the word "Appomattox." Beneath this was "Grant," in red, supported by four golden stars. Below this was the coat-of-arms of Michigan, shield supported by two white deer, rampant, the crest an eagle. This was very well made, the deer especially so. Sprigs of evergreen used on the piece were from Lookout Mountain, Shiloh, Orchard Knob and Chickamauga. A floral square from the Department of Massachusetts bore on a white ground the arms of that State in gilded relief.

The gift of our President was a large white hydrangea in full flower, and a lovely wreath of pink roses.

The ladies of the G. A. R., Department of Illinois, sent an open book bearing in immortelles the words: "They that rock the cradle rule the world."

Above stood an anchor from U. S. Grant Post, of Oregon, stacked muskets from Lafayette Post, New York, and many smaller pieces.

High above, near the centre of the tomb, was a huge pyramid of roses; on the front was a white field with the inscription in bright red: "China's affection for America's illustrious warrior." Near this was a great wreath from Colorado and a shield from Missouri.

The city of St. John, New Brunswick, sent a tall column

of evergreen, encircled by a green wreath, bearing thirty-seven white stars. An elaborate design from Pennsylvania was a square bearing the arms of the State in red, blue and green. Below this was a keystone in yellow, with the word Pennsylvania in pink, with crossed flags below. Near this was a fine knapsack, in black and blue.

In addition to the designs there were quantities of handsome plants from the Park Department, and a wealth of cut-flowers scattered around right royally. During the afternoon, the crowds moved aside to make way for a tall soldier, bearing under convoy a bright-faced little girl dressed in simple mourning. The child and her escort went within the enclosure, past the mechanically marching sentry to the gate of the tomb. There the little girl gathered a few laurel leaves and withered flowers; then, with her souvenirs, she passed through the crowd hand-in-hand with her military guardian. It was the dead general's grandchild. There is another and a lonelier grave in Riverside Park. Just on the bluff over the Hudson is a block of time-stained marble, bearing a crumbling urn. This is enclosed in a little iron railing.

On one side is this inscription:

"Erected to the memory of an amiable child, St. Claire Pollock, died 15th July, 1797, in the 5th year of his age."

Poor little St. Claire Pollock! He leaves no history—his people and his estate are alike unknown, but on Decoration Day some kindly hand, moved by a loving, considerate heart, placed a cluster of roses on his crumbling urn, a sympathizing tribute to his loneliness from the abundance bestowed on the "Silent Soldier" whom we all alike delight to honor.

E. L. TAPLIN.

CLIMBING VINES FOR HOUSE DECORATION.

I AM very apt to become impatient with some of the climbers that are slow of growth in the living-room, even the old-fashioned ivy requires very favorable conditions to continue its growth through darkened winter days. Morning-glories grow very spindling. Maurandya are delicate and require sunlight; so does the lophospermum, but many hardy varieties of passiflora will live and send forth sprays of green leaves that are glossy and beautiful, even though no flowers appear. Under these very unfavorable circumstances, the success of the Madeira vine was a subject for congratulation; it was cheerful in any adverse situation, and its light green foliage made a pretty contrast among other plants. But during the past winter the *Lygodium scandens*, or "climbing fern," has been peerless among the vines, for we have discovered that it is not injured by furnace heat

or coal gas, that it can exist with but little light, and grows rapidly. But to be a real success the plant must be started in spring, and make its full growth during the summer, trained on the strings. Before frost, if taken into a cool room (for sudden heat would cause the leaves to drop), it can be trained so as to become an ornament of beauty, and will remain so till spring, when it can be cut down and repotted, after which fresh fronds will start.

Lygodium palmatum is found wild in several States, but resists all attempts to cultivate it. Immense quantities of it are used after being pressed, and it is known as the "Hartford fern." The *L. scandens* is finer in leaf and more delicate in its fronds, being superior to smilax when in a growing state as a staple green for bouquets.

ANNIE L. JACK.

Flowers and fruits are always fit presents—flowers, because they are a proud assertion that a ray of beauty outvalues all the utilities of the world. These gay

natures contrast with the somewhat stern countenance of ordinary nature; they are like music heard out of a workhouse.—Emerson.



FLOWERING CURRANT (*Ribes Gordonianum*). Flowers red and yellow.

THE FLOWERING CURRANT.

THE several varieties of flowering currants are graceful shrubs of slender growth and small leaves; with less weight of foliage than characterize the lilacs, syringas, and bush honeysuckles, but so early in leaf and flower and pleasing in form, that they should grow in favor and become common objects. There is a grace in the drooping, almost trailing, habit of the lower growth of old bushes, when allowed full expansion on all sides, that adapts them for the borders of groups. The most useful of the species are the Missouri currant, *Ribes aureum*. This is a very early flowering shrub, blooming in April, as the leaves are beginning to expand. The blossoms are yellow, small, in racemes from one to two inches long, and deliciously fragrant. Covering the slender branches, bending to the lawn, these early flowers mingled with opening leaves have a pretty effect, and the shrubs, covered with delicate yellowish-green, glossy foliage after the

flowers are gone, give a pleasing effect the whole season. The red flowering currant, *Ribes sanguinea*, is much more showy in bloom. Its flowers are a deep rose-color, small like the preceding, but the racemes are a little longer, and it blooms even little. There are many varieties of hybrids between this and *R. aureum*, among which is the subject of our illustration, *R. Gordonianum*, which has both crimson and yellow flowers; it blooms profusely, and somewhat later than the preceding, and is of vigorous growth and very graceful habit of growth at maturity.

All the flowering currants increase rapidly by suckers; in fact, the main objection to their use as lawn shrubs is the fact of their increasing too fast, and extend over more surface than can be afforded for their use. However beautiful any object may be, if it usurps the place required for other objects it becomes weedy and in bad repute.

MASSACHUSETTS HORTICULTURAL SOCIETY.

JUNE EXHIBITION.

THE exhibition just closed was, upon the whole, a most gratifying success, although in many respects the exhibits were not up to the high standard of the society. Of course every visitor went there to see roses—roses grown in the garden under natural conditions, roses such as can be had and shown by the multitude, roses for the common people. Of such, we do not think the exhibit equal to that of former years, at least to the average of the past ten years. Certainly the exhibits made by some of the best growers did not compare favorably with former exhibits. This was noticeably the case with the collection from the nursery of Mr. Moore, of Concord, and the same is true with several others. We heard one gentleman say the climatic conditions had not been for the past few days favorable for the perfect development of the rose, and that the show was a few days late. His companion said "that was probably true to a certain extent, but he thought the interest in the culture of annual roses was, in a measure, weakening." This is undoubtedly the proper view of the case; there is no mistaking the fact that floriculture in this country is a caprice rather than an ardent love. The love for the rose is probably stronger and more enduring than the love for any other flower, not only because of its rare beauty and fragrance, but because of its history, which is the oldest of that of any other flower, and its cultivation has been associated with the higher ideals in literature and art.

Modern rose-growing is associated with commercial business to such an extent that the love for the rose is proportionate to its commercial value. The modern rose-grower, with all his appliances and his art, exhausts his energies in getting his roses into the market at unseasonable times, in order that their variety, instead of their loveliness, will add to his finances rather than to his intellectual fancies. He sees but little beauty in the rose when it sells for two dollars per hundred, and is ready to sacrifice it for anything, even though it be a sunflower, if it *pays* better. Consequently but little attention is paid to what are properly known as June roses. As we are dependent upon the rose-growers for our exhibitions, we need not look for a good show in the season of roses, because then no special pains are taken in cultivation, but in winter, when the face of the earth is as white as a *Mabel Morrison*, then we will see the *Jacqueminot* in all its glory, in fact all other roses double the size, and more richly clad in foliage, than at a season when nature is apparently doing its best.

The success the rose-grower has attained in getting roses *out* of season has seemed to enervate the energies of our amateurs in getting them *in* season. Who wants to show a rose in June when far finer flowers have been hawked about the streets in May, until the desire for roses is fairly surfeited? This will, in a great measure, account for the gradual decline of the June rose exhibits.

It would be folly to attempt an enumeration of the

varieties of roses that adorned the exhibition tables. It will suffice to say that every rose worthy the name was there and in liberal profusion. There was one "novelty" worthy of special mention, the old Cottage rose, long, well-furnished sprays cut from a bush planted seventy-five years ago in the garden now owned by C. M. Hovey, Esq., who has regularly exhibited roses from the same bush for more than fifty years. This old rose is a rarity, and for a white rose in June it will be a difficult task to find its equal, without attempting a superior.

In other classes of flowers were some remarkably fine orchids, the AMES collection being the largest and best. Some fine seedling pæonies graced one table, and for size, form and delicate colors they far surpassed any we have seen, not excepting the choice collections from the European growers. We wish to say one word for the old sorts, and that is, for a pure white none has been shown that can rival the old *Festiva maxima*, and for a crimson the original *Paony officinalis*.

A collection of seedling delphiniums, fully twenty-five distinct sorts, was an interesting exhibit. We cannot understand why delphiniums are not more grown, particularly when they can be grown so easily. Here were spikes as compact as it is possible for flowers to grow, nearly two feet in length, with colors that cannot be approached by those of any other flower, at least in a mass. The predominating and most desirable color of the delphinium is blue, yet among these seedlings were some fine bronze, lavender and pink colors, and some nearly pure white. These were all of the *formosum* type, and by cutting well back can be brought into flower again in autumn.

All seasonable flowers were shown in profusion and so arranged as to produce a most pleasing effect. In the arrangement a great improvement over previous exhibitions was noticeable. The exhibits were more broken; no long tables of even surfaces, but the high and the low so mingled as to give the large hall a picturesque appearance from every point of view. Many very commonplace exhibits were noticeable, which may be accounted for from the fact of liberal premiums and gratuities being awarded. The society, having an immense revenue, is prepared to award liberally every effort that a member may make that looks to the development or encouragement of horticulture.

The show of strawberries and vegetables was large, and, as a whole, remarkably fine. Although a week too late for strawberries, there were exhibits of Sharpless and other popular sorts of superior merit. There was a long table well filled with early vegetables, all of an excellent quality. In fact, the Boston market is the place to look, at all seasons, for good vegetables. There is none other in this country to compare with it as respects good quality and the neat, cleanly way in which everything is shown.



NEW CLIMBING ROSES.

PROMINENT among the novelties in roses of recent introduction are the "Waltham Climbing Roses," sent out by William Paul & Sons, Waltham Cross, England, and are described by them as follows:

"These are seedlings from Gloire de Dijon, possessing all the good qualities of that well-known variety, and are of better form and far handsomer than any of the red seedlings from Gloire de Dijon that have been hitherto

introduced. They flower abundantly and until late in autumn, and are recommended as supplying a long-felt want in the garden, namely, good, hardy, crimson, autumn-flowering climbing roses with fine foliage.

"The flowers last a long time and are bright to the last, unlike certain hybrid tea-roses which assume a cadaverous appearance soon after expansion."

(See illustration.)

A BIT OF NATURE.

SPRING, gentle spring, is a luxury we do not often indulge in in this our erratic climate. Of course we possess the season—in the almanac; but the balmy days, bringing a myriad floral beauties in their train, such as the English poets love to sing, they are a thing unknown to us. Spring in the latitude of New York means an alternation of enervating heat with shrivelling cold, and we can never sufficiently admire the perseverance of the spring flowers who courageously hold up their bright faces under these adverse circumstances. Some of the very first to bid defiance to adverse fate and Jack Frost are far up among the hills, where one would imagine the ground would not thaw out before June; where the fields are so hilly that popular report avers the agriculturist stands on a ladder to plant corn, and where the most prominent crop on the meadows is old red sandstone. But here, as soon as the snow disappears, it shows the little leaves of the trailing arbutus, hugging the damp soil and carefully protecting the tender buds from the night frost. Soon comes a day or two of warm sunshine; an intoxicating fragrance fills the air, and we see the dainty rosy blossoms:

“Tinged with color faintly

Like the morning sky,

Or, more pale and saintly,

Wrapped in leaves ye lie—

Even as children sleep in faith's simplicity.”

I know a green and fertile valley, shut in by rocky hills, whose Indian name gives aboriginal testimony to their ruggedness. The happy natives of that valley have not yet become sufficiently modernized to cut down every forest tree and plough up every woodland dell in the march for improvement; the farmer's “wood lot” there means a bit of the forest primeval, and consequently the district is a treasure-trove to the lover of wild-flowers. First comes the arbutus—shad flower it is called in southern Jersey, because it appears about the same time as the toothsome fish.

Soon we see patches of brilliant color flecking the rocky hillsides—it is the little mountain pink (*Phlox subulata*). It peeps from every cranny and crevice among the rocks, here and there, forming a perfect mat of bright rose pink. Lower down, skirting the hills, a mass of windflowers and false anemones looks like a belated snow storm; at intervals there is a golden gleam from a dog's-tooth violet, with its handsome leopard-like leaves. That last description seems somewhat inaccurate, for a green-and-bronze leopard would be a startling novelty; but we will let the point pass. Equally it is a misnomer to call the plant “dog's-tooth violet,” since it belongs to the natural order of lilies. However, there is a purple variety native in Europe which blooms with the violets; this originated the European name, which has inaccurately been bestowed on our own plant (*Erythronium Americanum*). Its local names of yellow adder's-tongue or yellow snowdrop seem more suitable. Down among the anemones we find

hepaticas, varying in hue from the palest lavender to deepest purple. The grayish, silken hairs on leaf and stem give them a comparatively aged aspect, much at variance with the bloom above it.

Up above the mountain-pink is the columbine—*Aquilegia Canadensis*—with its oddly-shaped red and yellow flowers. The country folk, for some inexplicable reason, call this honeysuckle. Tantalizingly enough the finest specimens of columbine always grow on some inaccessible rocks, where they derisively nod their gay heads at the disappointed collector below. Up on the very highest point of one of these Jersey hills, where stunted cedars grow among the rocks, is a large bed of the prickly pear (*Opuntia vulgaris*). I have seen this often enough in sandy barrens near the coast; but what made the misguided plant choose a locality thirty miles inland, high among the hills? Singular to relate, this one spot is the only place in the district where it grows, for which we may be duly grateful. It is certainly a picturesque plant, but any contact with it is demoralizing in the extreme. The fruit is certainly very palatable, especially after being frozen, but its multitudinous and microscopic prickles make it a delicacy to be enjoyed with much caution. These hills are a beautiful sight when the mountain laurel is in flower (*Kalmia latifolia*). Great bushes become a mass of waxen or rosy tinted blossoms. The natives appreciatively call it calico bush. There is one very interesting oddity about this flower. Half way up the bell-shaped corolla are ten depressions, looking like a circle of little dents. The ten anthers are imbedded in these depressions. When the flower is fully matured, these anthers spring loose with a jerk, and discharge their pollen against the pistil with an accuracy of aim highly refreshing to witness. It is an interesting sight, though one most flower lovers are apt to miss, to watch great clusters of flowers firing off whole platoons of pollen at once. And the poor pistil hasn't the slightest chance to retaliate.

The low-growing *Kalmia angustifolia*, or sheep laurel, is very pretty, with its small crimson flowers, but it bears an evil reputation through its poisonous qualities; one of its popular names is lambkill. It is considered very dangerous to cattle, though I have never seen cows eat it, but goats appear to browse upon it with much enthusiasm. Through the damp mountain woods we see great patches of *Azalea nudiflora*—pinxter flowers. Country people call the gall produced by the boring cynips pinxter apples, whether on azalea or not. The name pinxter is, of course, a corruption of the German name for Whitsuntide; the azalea is usually in full bloom at that time. On the lower level the streams are bordered by the June-berry (*Amelanchier Canadensis*). Its racemes of pretty white flowers are very showy.

In the damp ground we find a quantity of the little *Dicentra cucullaria*—Dutchman's breeches. The plant is not any handsomer than its name, and I don't myself see

any great resemblance to a Hollander's unmentionables, as it is just like a tiny greenish-white bleeding-heart. However, there the name is, and it is about as descriptive as popular names usually are.

Of course, as soon as the swampy meadows thaw in the early spring they are glorified by a golden mantle of *Caltha palustris*—it is as saucy and cheerful and democratic as the dandelion. Its companion in these swampy solitudes is the skunk cabbage, much-maligned plant. If we will only look at it impartially, the skunk cabbage is a very

handsome plant—the very thing for an aquatic garden—with its fresh, juicy-looking leaves and handsome spathe. Of course it makes itself offensive if you wilfully lacerate its feelings, and small blame to it. Probably, in common with other plants offensive to our sense of smell, it possesses some occult virtue which we wilfully ignore, and as our ignorance on the subject is colossal we may suggest the establishment of a committee for the investigation of *Symplocarpus fatidus*—it would, doubtless, confer much benefit on society at large.

E. L. TAPLIN.

FLOWER SONG.

If the buttercups could sing,
What a pretty "ting-a-ling"
We should hear in summer time;
Could the daisies pipe a strain,
It would be like falling rain,
Just a silvery chime.

If the violets knew an air,
It would sound most like a prayer
On the sea-shell's theme;
If the wild-rose sang a catch,
Never would be heard its match,
Save in some sweet dream.

—Mary N. Prescott, in Harper's Bazar.

THE NETTLE IN LIFE AND STORY.

"O'er the throng *Urtica* flings
Her barbed shafts, and darts her poisoned stings."

THE nettle, which is the vernacular equivalent of the Latin *urtica*, has always been an unpopular plant. It is connected in the popular mind with witches, midnight assassinations, poison and suffering. In its floral interpretation it symbolizes slander. Abounding in dark, waste places, swamps, morasses and wild, rocky pastures, it seems to shrink from the joy and sunshine of the world, and repels all friendly advances by its sharp sting and acrid juices. Admitting its unprepossessing character, still there is no doubt that it has been unjustly maligned, and that it is really a much more useful and interesting plant than would appear at a superficial glance.

The family it belongs to is a very important one, embracing the hop and hemp, the mulberry, the fig and the banyan. It is an extensive genus, containing nearly eighty different species. Indigenous to the tropical parts of America, India and the islands of the Pacific, the plant has spread over all the temperate portions of the world. Three species of nettle are wild in the British Isles, and there are five species found in the Atlantic States. The various species seem to have followed man in his migra-

tions, and by their presence usually indicate a soil rich in nitrogen.

The genus consists mostly of herbaceous plants (a few are trees, however, like an Australian species which often grows to be from one hundred and twenty to one hundred and forty feet in height), all supplied with stinging hairs; they have a sharp, watery juice and a tough, fibrous bark. The leaves are opposite and the flowers are monoecious or dioecious. As the nettle belongs to the apetalous division of exogenous plants, the structure of the flowers is exceedingly simple; the staminate flower consists of four sepals, the two inner of which are larger, inclosing the one-celled ovary, which in fruit is an akene, surrounded by the membranaceous enlarged inner sepals. The stinging hair of the nettle, when magnified, is seen to consist of a single cell, bulbous at the base, where it is surrounded by cells of the epidermis, and terminated by an exceeding sharp and fragile point, which breaks off after entering the skin and allows the irritating juice contained in the cell to flow into the wound. If the plant is grasped roughly the hairs are broken off before the point can penetrate the skin, and little or no pain results. Frequently growing in company with the nettle, or close

to it, is the dock (*Rumex*), which offers an antidote to the venomous stings of its neighbor. The peasant children in some of the English counties repeat a charm during the application which is popularly believed to increase the potency of the herb :

" Nettle in, dock out,
Dock in, nettle out ;
Nettle in, dock out,
Dock rub nettle out."

Of the five species found in the United States two have been introduced from Europe. The common small nettle of Europe, *U. urens*, is found near dwellings in the older States. It is an annual, growing from eight to twelve inches in height. The nettle, *U. dioica*, is a perennial, from two to three feet high, bearing staminate and futile flowers in much-branched spikes. This last is so well armed with stings that, as the old herbalist Culpepper quaintly remarks, "it may be found by feeling on the darkest night." The three native American species are the slender nettle, *U. gracilis*, a perennial from two to six inches high ; *U. capitata*, which grows in the South, three to five feet high ; and *U. chamaedryoides*, a Western and Southern species, which grows from six inches to three feet, and flowers in dense, globose clusters.

The young shoots of nettles are considerably used as a pot herb or greens in England, and in former times the plants were bleached by earthing up, as is now practised with sea kale. There is an old Scotch song which tells when to pick the nettle for greens :

" Gin ye be for lang kail,
Cow [pluck] the nettle early ;
Gin ye be for lang kail,
Cow the nettle early.
Cow it laigh, cow it sune,
Cow it in the month of June,
Just when it is in the blume,
Cow the nettle early."

The nettle has had its use in medicine ; stinging with nettles to "let out the melancholy" was prescribed by the old writers. Its roots, boiled with alum, afford a yellow dye, and the juice of the stalks and leaves imparts to woolen stuffs a pleasing and permanent green. One variety of the plant produces tubers, which are used in India as an article of diet, either raw or cooked. In Sweden and Russia nettles are regarded as being so productive of milk that they are cultivated as fodder plants for cows. The fibre of the plant is considered superior to that of flax, and in Norway it is manufactured into fish lines and other small cordage. Paper is made from it in France, while in Germany it is manufactured into a variety of textile fabrics.

The very word nettle—*netel* in Anglo-Saxon and Dutch—originally meant "that with which one sews," the Germanic and Scandinavian nations having in former times used the nettle fibre as thread, as was done by the Scotch in the seventeenth century. Nessultuch or nettle-cloth is a name still applied to muslin, from the fact that it was formerly woven from the fibres of this plant. Professor Reuleaux, the representative of the German manufacturers at the Philadelphia Exhibition in 1876, ad-

vised experiments with the nettle with a view to the production of native yarn. The matter was taken up by a lady, who planted nettles for the purpose upon a barren part of her estate, and in 1877 was able to exhibit nettle fibres in all stages of preparation. Thereupon hundreds of people in Germany, Belgium, Holland, Poland, Hungary, Sweden and Switzerland commenced the cultivation of the nettle, and two years later the first German manufactory devoted to this industry was opened at Dresden. A yarn has now been produced which fulfils all requirements ; but the Chinese nettle gives the best results, yielding a fine, glossy yarn of greater strength than that made from the common nettle. The fibre is, therefore, known as China grass.

The poetic and legendary associations of the nettle are worthy of note. It brings to mind Chaucer and Waller and Shakespeare, and the gentle Ophelia, wreathed with

" Cornflowers, nettles, daisies and long purples."

Byron sings of the "nettle's stinging hairs." The family of Malherbe had for armorial bearings three nettle leaves proper. Among the legends of the Rhine Valley there is a beautiful story told of the founder of the castle of Eberstein in which the nettle plays a prominent part.

In those old days, while the fairies still lived on earth, the young daughter of the robber chieftain of the castle was married to the lover of her choice. The baron was absent on a marauding expedition when the wedding bells rang their joyful notes, and only a few old retainers and bronzed, gray-headed soldiers, besides pages and minstrels, were present in the stately chapel when the priest read the service and pronounced the benediction. But never was there a more beautiful bride than the Lady Hildegarde as she stood beside the tall and noble knight, in her white, falling robes and a wreath of mingled rose and nettle encircling her queenly head.

Scarcely was the marriage service finished when a bugle blast was heard, and as the portcullis rose over the drawbridge rode the baron's men-at-arms, with trailing lances. In the rear four men bore a litter, and the champing warhorse was led by his master's page. The baron had been wounded in his foray and had come home to die. So the marriage bells changed to a dirge, and the wreaths of rose and nettles were removed for the black pall, the gleaming cross and the fitful light of the tall mourning tapers.

A new lord ruled in the castle—the dead baron's brother—a savage, cruel man, who separated the young lovers and swore that Lady Hildegarde should be his wife and no other's. She implored and prayed on bended knees for his mercy, but the brutal baron relented not.

Once, while watching over her father's grave and uprooting the nettles which had sprung from the damp soil, the maiden heard the heavy step of the haughty lord and felt the touch of his heavy hand.

"Let them grow, lady, let them grow ; for only when you have spun from them your wedding vest and my winding-sheet can you expect to escape my power."

And he smiled a cruel, wicked smile, pointing to the noxious weeds.

From that time the poor girl's cheeks grew thin and her eyes were swollen from grief, but not a thread could

she spin, though she pulled and broke the nettles many a time.

One night, however, as she knelt in her room, vainly striving to make at least a thread from the nettle's fibres, and mingling her tears with her toil, a tiny little figure with a kind, motherly face and a sweet, musical voice entered the room with the moonbeams, kissed the tears from the pale cheeks and promised to aid her. In a week's

time the work was done, and the maiden was able to present to her cruel persecutor the garments he had ordered.

That night the cruel lord died, and the maiden became the castle's castellan, and the bells rang joyfully for a second wedding feast as Lady Hildegard brought home the husband of her choice—the bridegroom from whom she had so long been separated.

CLINTON MONTAGUE.

A SONG OF SUMMER.

THE flowers are fringing the swift meadow brooks,
The songsters are nesting in shadowy nooks;
The birds and the blossoms are thronging to meet us,
With loveliness, perfume and music they greet us—
For Summer, the beautiful, reigns!

The bobolink tilts on the tall, nodding clover,
And sings his gay song to us over and over;
The wild-roses beckon, with deepening blushes,
And sweet, from the woods, sounds the warble of thrushes—
For Summer, the beautiful, reigns!

The white lilies sway with the breeze of the morning,
In raiment more fair than a monarch's adorning;
The bright-throated humming-bird, marvel of fleetness,
Comes questing for honey-blooms, draining their sweetness—
For Summer, the beautiful, reigns!

High up in the elm is the oriole courting,
A new suit of velvet and gold he is sporting;
With gay bits of caroling, tuneful and mellow,
He wooes his fair lady-love, clad in plain yellow—
For Summer, the beautiful, reigns!

The blossoms and birds bring us, yearly, sweet token
That Nature's glad promises never are broken.
Then sing, happy birdlings, nor ever grow weary!
Laugh on, merry children, 't is time to be cheery!—
For Summer, the beautiful, reigns!

—Emma C. Dowd, in *St. Nicholas* for July.

A LOVE of flowers will supply a praiseworthy incentive to the merchant, clerk, artisan or laborer to leave behind him the smoke, dust and comfort of the crowded city and bask during an hour's or a day's leisure in the invigorating country air, while he enlarges his stock of knowledge by investigations that gently interest but do not overtax his intellectual powers. The moralist will find in the love of plants and flowers a helpful handmaiden to religion and virtue; even the mechanical pursuit of the mere trade of gardener has been conducive to a relatively superior morality and freedom from crime. Horace Mann found

that there were few gardeners, in proportion to their numbers, than of any other trade or calling, in the poor-houses and prisons of Great Britain. Floriculture has also an advantage over many amateur pursuits in the cheapness and facility with which it can be followed, as every plant may be regarded as an unfolded book, and every flower an attractive object-lesson, while, unlike mechanics, astronomy or chemistry, it needs no expensive working apparatus.

Flowers are the most delightful of all teachers!

PLEASURES OF GARDENING.

GARDENING as a recreation has ranked among its votaries illustrious princes and renowned philosophers, and has ever been the favorite amusement of the most eminent and worthy of mankind, whether occupying exalted positions in public life, or fulfilling the more retired and unobtrusive duties of a private sphere. It is at once a pleasure of the greatest and a care of the meanest, and, indeed, an enjoyment and occupation for which no man can be too high or too low. The interest which flowers have excited in the breast of man, from the earliest ages to the present day, has never been restrained to any particular class of society or quarter of the globe. Nature seems to have liberally distributed them over the whole world, as precious medicaments for both body and mind, to impart cheerfulness to the earth, and to furnish agreeable sensations to its inhabitants. The savage of the forest, in the joy of his heart, binds his brow with the native flowers of his romantic haunts, while a taste for their cultivation increases in every country in proportion to its advancement in civilization and refinement. Love for a garden has a most powerful influence in attracting men to their homes, and on this account every encouragement that is given to promote a taste for ornamental gardening secures an additional guarantee for domestic comfort, and the unity, morality and happiness of the social circle. It is likewise a recreation which conduces materially to health, advances intellectual improvement, softens the manners and subdues the tempers of men.

Flowers are of all embellishments the most beautiful, and of all the sentient tribes, man alone seems capable of deriving enjoyment from them. The love for them commences with infancy, continues unabated throughout the period of adolescence and youth, increases with our years, and becomes a great and fertile source of comfort and gratification in our declining days. The infant no sooner walks than its first employment is to plant a flower, removing it ten times in a day to wherever the sun appears to shine most favorably. The schoolboy, in the care of his little plot of ground, is relieved from his studies, and loses all the anxious thoughts and cares of the tasks in which he has been engaged or the home which he may have left. In manhood our attention is generally demanded by more active duties, or by more imperious and perhaps less innocent occupations; still, a few hours employment in gardening affords a delightful recreation, and as age obliges us to retire from public life the attachment to flowers and the pleasure in gardening return to soothe the later period of life.

In the growth of flowers, from the first tender shoots which rise from the earth, through all the changes which they undergo, to the period of their utmost perfection, man beholds the wonderful process of creative wisdom and power. He views the bud as it swells, looks into the expanded blossom, and delights in its rich tints and fra-

grant odors; but, above all, he feels a charm in contemplating the precise conformation and mutual adaptation of its organs, and the undeviating regularity with which their various metamorphoses are affected, before which all the combined ingenuity of man dwindles into nothingness. For while the simple cultivation and management of flowers is productive of much innocent pleasure, how immensely is that pleasure enhanced when science is secured as its auxiliary! The cultivator of flowers on whom the light of flowers has just dawned, feels like one who has just merged into a new field of existence; a multitude of subjects, previously unheeded, present themselves to his consideration, which, as he proceeds to contemplate them, diverge into successive series of interesting associations, and awaken in his mind emotions of pleasure and gratification of which he was before unconscious. Instead of being content blindly to follow the routine of management which example prescribes, he sees that certain plants require a peculiar mode of treatment, and is led to inquire why that treatment is necessary. In prosecuting this investigation, other and more intricate subjects present themselves to his mind; thus inquiry begets inquiry, and one suggestion gives birth to another, until, in the solution of them, he discovers that all nature is governed by universal and unerring laws, that the annual changes to which his plants are subjected are intended to answer specific and important ends, and that the whole change of gradation in organized matter is linked together in the most perfect order and harmony. This knowledge attained, he suffers not the most trifling of nature's phenomena to pass unnoticed. The development of a leaf on the most familiar tree offers a field for his observation, for he learns that it is destined to bring forth, nourish and mature a germ, which is capable of producing a distinct tree, that in process of time would equal or even exceed in size the parent that forced it into existence. He observes the leaves wither and fall in the autumn without regret, informed that they have fulfilled their important functions, and that were they capable of remaining they would probably excite the young buds into premature action and cause them to fall a prey to the inclemency of the coming season.

But science is likewise capable of imparting an interest to the most common gardening operations. The pupil of science scatters his seeds into the ground and covers them with soil that the various genial gaseous elements involved in such a situation may stimulate the vital principal into action. He, however, spreads the soil over them very lightly, since he is equally well aware that proximity to the atmosphere is alike essential to their germination. He watches the young seed-lobes as they appear through the ground, and in imagination perceives the little rootlet issuing simultaneously from the newly-excited embryo; the first leaves are formed, and calculating correctly on a similar extension and ramification of the root, he takes

the earliest opportunity of transplanting it to its desired destination. This operation he either defers till dull and cloudy weather, or affords his plants an artificial shading from the sun, well knowing that the delicate seedlings require time gradually to accommodate themselves to their new position before they can absorb sufficient liquid nutriment to counteract the profuse evaporation which would take place were they not screened from the sun's rays.

On such a subject, however, it is needless to expatiate,

for, after all, the pleasures of gardening are not derivable from elaborate treatises, neither are they easily communicable. They must be sought after to be duly appreciated, and once tasted the mind will never become satiated, but will rove as the bee, from flower to flower, in search of delicious and nutritive sweets, extracting fresh stores of wisdom and pleasure from each successive object, till finally it succeeds in amassing that which most truly constitutes man rich—a fund of knowledge of his Creator's work.

PAXTON.

AMID NATURE'S BEAUTIES.

The love of Nature's works
Is an ingredient of the compound man
Infused at the creation of the kind.—*Cowper*.

How blest the man who in these peaceful plains
Ploughs his paternal field; far from the noise,
The care and bustle of a busy world!
All in the sacred, sweet, sequestered vale

Of solitude, the secret primrose path
Of rural life, he dwells; and with him dwell
Peace and content, twins of the sylvan shade,
And all the graces of the golden age.

—*Michael Burns*.

The green earth sends its incense up
From every mountain shrine—
From every flower and dewy cup
That greeteth the sunshine.—*Whittier*.

If thou art worn and hard beset
With sorrows that thou would'st forget,
If thou would'st read a lesson that will keep

Thy heart from fainting, and thy soul from sleep,
Go to the woods and hills!—no tears
Dim the sweet look that Nature wears.

—*Longfellow*.

O Nature! how in every charm serene.—*Beattie*.

FLOWERS—of all created things—are the most simple and innocent, and most superbly complex; playthings for childhood and ornaments of the grave. Flowers, beloved by the wandering idiot and studied by the deep-thinking man of science! Flowers, that of perishing things are most perishing, yet of all earthly things are the most heavenly! Flowers, that unceasingly expand to heaven their grateful and to man their cheerful looks, partners of human joy, smoothers of human sorrow; fit emblems of the victor's triumphs, of the young bride's blushes; welcome to crowded halls, and graceful upon solitary graves!

What a dreary, desolate place would be a world without a flower! It would be a face without a

smile—a feast without a welcome. Are not flowers the stars of the earth, equal to the stars of heaven? One cannot look closely at the structure of a flower without loving it. The delicate arrangement of the petals, sepals, and that of the ovary, are all emblems of God's love to the creation, and they are the means and ministrations of man's love to his fellow creatures; for they first awaken in his mind a sense of the beautiful and the good. They lead us to thoughts of generosity and moral beauty, detached from, and superior to, all selfishness; so that they are pretty lessons in Nature's book of instructions, teaching man that he liveth not by bread or from bread alone, but that he hath another than an animal life.—*William Roberts, Penzance*.

NATIVE PLANTS IN GARDENS.

IT would be hard for us to imagine many of our splendid hardy perennials in their native homes, growing in the greatest profusion, perhaps coloring large tracts with their bright flowers; and, again, we might not recognize them, scattered as they might be among many other forms of plant life, and they would very likely be quite different in appearance from the cultivated specimens.

It is a well-known fact that many plants improve greatly in cultivation, even without any attempt at selection of best forms or hybridizing varieties.

This is a natural consequence of their improved condition; they no longer have to fight for an existence with surrounding weeds and plants. It does seem sometimes as though the more delicate plants hid themselves away from their stronger and coarser rivals, in the most barren and forbidding places. We look in the rocky ledges and bleak alpine summits for the most delicate and highly colored of our flowers, and in the deep woods and shady swamps we find many charming and highly organized forms that would be pushed aside and choked to death by coarse-growing weeds in other situations. Even on the sandy desert are beautiful flowers, perhaps from the most unique and awkward forms. Like the cacti of our Western plains they are adapted to their surroundings in a most remarkable way in form and structure, and although the most unpromising and as barren-looking on the exterior as their surroundings, yet they have most beautiful flowers and delicious fruit, and the flesh of the plants furnish a refreshing drink to the thirsty traveler over these barren plains.

These plants that are found on the most forbidding places, on alpine summits and sandy deserts, are often among the most interesting in the vegetable kingdom and are also the most difficult to cultivate successfully. Those from alpine summits, where they are exposed to the full blaze of the sun and the greatest degree of cold, are, strange to say, the hardest to keep from burning up in summer, and being killed in winter in our gardens. In their mountain homes the hair-like roots penetrate to a great depth in the crevices among rocks where there is continual moisture; in the gardens, under the favorable conditions in which they are planted, there is not the necessity for the roots penetrating so deep. Where the soil is moist they spread in all directions, gathering their moisture from near the surface, but as soon as the soil becomes dry, then the plant is killed, as the roots, not running deep, have no reservoir from which to draw a supply of moisture.

The plants from the sandy plains are mostly succulent, having but little connection with the soil by roots. They are a very thrifty and provident class, for they lay up a supply of moisture when it is to be had, which is only oc-

asionally, and prepare themselves for the long dry seasons that are sure to follow.

These plants cannot stand good treatment, and when they are removed to a rich and moist soil they decay from over-feeding or much moisture.

There is another class of plants that occupy the sandy deserts, of a different character, many of them with dry and tough stems, many with handsome flowers and others of little interest. These plants have long tap-roots, very tough, and penetrating to a great depth where they can find moisture. During the dry weather these will, as a rule, adapt themselves to the garden and grow with increased vigor.

The greater number of our hardy garden plants come from the intermediate positions, from the woods, fields and meadows of all temperate countries; many of the most showy hardy perennials are from the coldest regions of the temperate zones; many southern species, even some from South Africa, are hardy here. It sometimes happens plants treated for years as tender are found to be hardy under proper conditions. *Hyacinthus candidans* was treated as a half-hardy bulb for some years after its introduction, but is now proven perfectly hardy. The tritomas, for a long time considered tender and removed to the cellar every winter, are now by many left out through the winter without injury, if the tops are so twisted and protected that water will not work into the crowns.

We have on our mountains, deserts and plains a wonderful flora, and great additions have been made to the gardens of the world from these sources.

We here think of Japan and China as the most wonderful natural gardens of the world, we have had so many charming hardy plants from there. But their flora is no more wonderful or interesting than our own, and no one country has added more to European gardens than ours. A host of trees, shrubs and plants might be named that were carried from the United States and there made celebrated. Indeed, one great and important division of hardy ornamental shrubs, the rhododendrons, azaleas, kalmias, andromedas, and others allied to the heath family are called "American" plants in England, so many of them were taken from this country.

Our people are too often ready to accept a foreign plant because it is foreign, when an equally beautiful native will not be received with favor. But this, I believe, will change, as the love and appreciation of flowers grow, as they are growing, and the true lover of flowers will accept the beautiful and desirable, let them come from where they will.

WARREN H. MANNING.

POLLY'S PLAN.

"GUESS the thaw's set in steady for a day or so," said Bob Nelson, entering the cheery farmhouse sitting-room one winter morning. "It won't be many weeks before it will be time to fetch out our ploughs an' go to work in the fields. An' I noticed just now, when I was in the tool-house, that we'd oughter have new chains for the ploughs. an' have the shares mended; one of 'em's dreadful rickety an' t'other's broke one side. They'd oughter be fixed now, while we ain't usin' 'em, an' the sooner the better, for winter ain't long a-goin' after the holidays get away. Eh, Polly?"

The young girl addressed smiled up at him from a heap of carpet-rags she was sewing, and nodded her head,

Farmer Nelson, busy over an account-book at a desk in one corner, sighed heavily in reply to his son's remarks.

"I know it, Bob. There's lots of things needed, outside an' in, but no way o' gettin' 'em, unless—"

He paused a moment, and then went on quickly, as though to get through with an unpleasant matter:

"Unless we sell Dick, lad!"

The young man's face darkened with something like pain.

"Sell Dick! My colt that is just now gettin' good for use, an' in five years will bring five times the amount we'd get now. Can't we manage without that?"

"Yes, my lad, we can. There's the Alderney would bring a good price, or one of the Jerseys, only they make fine butter an' that sells better'n milk."

"Well, really," said Bob, sitting up on the edge of the desk by his father, "I s'pose mebbey you'll think its selfishness in me to say it, but I do think in the end you'd find it more savin' to sell the cow than the colt, for the cow is gettin' old an' the horse is young."

"Guess you're right, lad, an' we'll take the cow to Farmer Green's to-morrow. I heard he was buyin' stock an' givin' a fair price for it, an' Daisy's a good cow, as he can see."

"Papa Nelson," said Polly, leaning forward, with shining gray eyes, her ball of rags rolling across the floor, to the delight of a mischievous gray kitten. "Papa Nelson, I'm going to ask a favor of you!"

"Well, child?"

"You know those sashes of glass you use over your hot-beds in spring. If I'll be very careful and not hurt 'em one bit, may I use 'em till you want 'em?"

She was fairly trembling with eagerness, and her cheeks flushed with the daring of her request. But she need not have feared. The farmer was too taken up with his affairs even to wonder at the strange wish, and answered absently:

"Help yourself, child; only be careful."

That was his usual reply to any request of hers. She was not his own child, but he loved her as though she were. A widow neighbor of theirs died when Polly was

three years old, leaving her alone and penniless, and Farmer Nelson and his dear old wife took her in as their own, and had never a cause for regret. She was a loving child, and for all her mischievous ways grew into an earnest, womanly girl.

Bob was five years older than she, but they were inseparable companions and confidants, as he showed that morning by following her from the room to learn her plan.

When they told Mrs. Nelson, she, dear, motherly soul, entered into it with all her heart, having great faith in the girl's ability to do almost anything.

That very day, with Bob's help, Polly went to work.

Along the south side of the granaries, facing full the sun all day, was an extension, built on years before for a hatching-room for the hens in winter. From the roof down to within a foot of the ground were large sashes of glass, and the middle of the roof was the same. In the centre of this building was an iron railing within which, when it was used for hens, had been a small furnace to keep the atmosphere at an even temperature.

This had proved successful in hatching, but for the past two years had not been used, and Polly settled upon it as just what she wanted.

Bob, having nothing special to do at that time, went to work with her with a will. They cleaned the place, hoed and raked the earth up to a state of perfection, the small furnace was carried in, Bob built shelves one above another, slanting back, that each should get the same amount of sunlight, each tier ranging down to the ground in the centre, through which and around which were walks of planks. Where the glass was broken they took whole panes from the hot-house sashes and put them in; every crack wherein a draught might steal was carefully fastened. Then sulphur was burned to thoroughly cleanse and destroy any lurking insects; the glass was washed till it shone clear as crystal, and at the end of a week Polly's plan was finely under way.

But this plan was kept a profound secret between those three through the remainder of the busy winter.

Farmer Nelson, anxious over the slow decline of the farm on which he had lived all his life, never gave enough thought to the subject to make any inquiries, and in winter the south end of the granaries was hidden from view.

When the early spring came round, however, and he wished to start his early vegetables, he one day asked for his hot-house sashes.

It was at the dinner-table and the question was sudden.

Polly's cheeks grew red as roses and her eyes purple with excitement, but she made ready answer ere Bob or his mother could speak.

"Will to-morrow do for them, Papa Nelson? I can't very well spare 'em to-day unless you need 'em very much."

She smiled bewitchingly at him across the table, a wonderful love and gratitude shining in her face, though he did not see it, as his eyes were fastened dejectedly on his plate and his thoughts were far away among the fields ready for the plough, and the ploughs that were not ready for the fields.

So he answered absently, "Very well, child," and went on with his dinner.

But Polly had lost her appetite. As soon as she could she left the table, followed by Bob, and presently they drove away out of the gate behind Bob's colt and were not seen again till supper time. Then both were flushed and nervous and evidently had no appetite.

When the meal was ended, the dishes cleared away and they were prepared for a quiet evening, the cause of the excitement was made known.

"Papa Nelson," said Polly, sitting down on a stool at his feet, "I want to thank you for the use of that window-glass; I have done no harm with it, an' I think you'll find it good as new."

She paused for breath, but dared not look at Bob or his mother. Her hands were tightly clasped in her lap and her cheeks grew red and pale by turns. Even the pre-occupied old farmer felt her excitement to a degree, for he roused up and a slow, faint smile dawned on his wrinkled, careworn face as he laid his rough hand on her head.

"Don't bother to thank me, child; you were perfectly welcome to it so long as you didn't break it. Someway, it ain't so easy to get new things now as 'twas once. That's all."

"Papa Nelson," her voice was trembling, "won't you go out with me to the granaries, I've somethin' to show you."

He roused up slowly.

"Won't Bob do just as well, child? I'm a bit tired. You know I ain't so young as I was once," and a deep sigh crossed his lips.

"No, Papa Nelson, Bob *won't* do as well. He's going, too, and so is mamma, but *you* must, too, please."

"Of course, if you insist, child," he said, showing his surprise, "but Bob generally does better'n me, an' my reumatiz is pretty bad to-night."

She did not heed nor seem to care for this, but ran and got his coat and hat and boots, and helped him put them on. She was trembling with excitement. It is doubtful if she would have remembered to put anything on herself if Bob had not brought her wraps.

The whole proceeding was strange, and the old man wondered much all the way out to the granaries.

As they turned the corner and streaks of light streamed out between cracks in the building, Mr. Nelson exclaimed in horror:

"Are the buildins afire? Run, Bob, run an' get the hose! We must put it out quick! Think o' the consequences o' *fire*! Things are bad 'nough now, anythin' much worse 'll ruin us!"

But Polly clung to his arm and cried out, her voice ringing with gladness:

"No, no, no, Papa Nelson, it ain't fire! Shut your eyes just a minute an' you'll *see* what it is!"

Bob was ahead with his mother, and he opened the door at that moment, and Farmer Nelson did see!

He stood on the threshold like one stupefied. What place was it? Was he dreaming? Was *this*—the truth suddenly dawned upon him in all its immensity.

"Polly," he said, his voice hoarse with emotion, "Polly, child, is *this* what you wanted my sashes for—is *this* what you an' Bob have been a-doin' all winter?"

And he well might ask.

The room was a fragrant bower. One entire side of the walk was six tiers of shelves laden with flowers brilliant with bloom. There were exquisite roses, with petals like tinted satin and leaves perfect as a dream; pansies, purple and white and yellow, some variegated, yellow and white and purple, as though touched by a fairy's brush; fragrant petunias, both single and double; pinks of all colors and odors; geraniums, pink and crimson and delicate salmon; oxalis, like wildwood beauties strayed into home life; begonias with tiny waxen red cups; fuchsias like dainty tinted bells, drooping low amid dark leaves, while at the beginning and end of each walk were tall callas like small palms, bearing their rare waxen chalices as a queen would bear her treasures, and along the middle, drooping and trailing above the others, was delicate smilax—a dash of pure green amid brilliant colors.

The other tiers held plain, square boxes of strawberry plants and radishes.

Such a contrast to the others! And yet when Polly led the old man near and showed him the deep red berries among the leaves, they were, in his eyes, far more precious than all the flowers together!

"An' you an' Bob did it all?" queried Farmer Nelson, scarce knowing what to say, so great was his wonder.

"Yes, Bob an' I did it all ourselves! Just sit down here beside mamma, Papa Nelson, and we'll tell you about it. *She* knows all about it, of course. There's plenty of room on this bench, Bob," smiling brightly up at him as he stood beside her, his hand on her shoulder. But he shook his head and stood looking down upon her, a strange light on his face.

"Well, you see," Polly continued, gently stroking a hand of each, "we knew you two dear people were dreadful worried 'bout things an' because there was no way to get what was needed on the farm, so we just set to work to help."

"You remember when Mr. Wilson was here last summer; he said this building was so fine for a hot-house, an' told how much money was made every year by raising flowers an' berries early an' sendin' 'em to the city."

"This plan hopped into my head that day you an' Bob were talkin' 'bout sellin' Dick, an' we determined to help you. Bob did most of the work. He built this 'all up snug an' kept the fire a-goin' day an' night ever since. We got a book that tells all 'bout such things, an' so we knew. In the daytime, o' course, we didn't need so much fire; 85° is the highest an' 45° the lowest at which they do best. We got the flowers that were easiest to raise this year to begin with. It's kept us pretty busy, seein' that the soil was just right accordin' to the book, an' washin' the leaves once a week, an' all that. The callas are my pets. They shall go for Easter time."

"O' course, we had to have capital to start on, an' Bob used \$50 he had put away. Why, if it hadn't been for Bob," and she gently touched the strong hand on her shoulder, "we just couldn't have done it."

"Where'd we get the plants? Why, we just wrote to one o' the seedsmen an' sent the money, tellin' him to send what would be best, an' he did. It's my opinion, though, that he put in more'n we sent money for."

"It's been lots o' pleasure, hasn't it, Bob? But we were so 'fraid you'd find it out before—"

She paused and drew out of the bosom of her dress an old leather wallet.

Farmer Nelson sat, his head in his hands, motionless, beside his wife, whose face was fairly beaming.

"Papa Nelson," Polly hurried on, "we have already sold \$50 worth of stuff from here, so far, an' to-morrow the berries an' flowers are to be sent off again. Mr. Wil-son wrote us where to send 'em as soon as we let him know what we were doing, an' we get \$1.50 a quart for the berries, and twenty-five cents a bunch for the flowers. The flowers are hardest to send off, so that they'll be fresh, but we pack 'em in cotton, wet, an' they say they go finely. Next year, o' course, we'll know better how to do, an' this summer we'll have a goodly array of flowers in our garden. Why, if we keep on," she rose up, laugh- ing nervously, "we'll make a small fortune off our farm."

"An' now, Papa Nelson," she laid the wallet on his knee and her arm across his shoulder, "you shall have new sashes for your hot-beds, an' some other things you need without selling Dick! You have been to me," her voice broke, "more than I can tell, but I know my parents bless you in heaven!"

There was silence in the room for a moment, and then Farmer Nelson arose, tears running down his wrinkled cheeks, his voice trembling with emotion.

"Polly an' Bob," he said, "I have been discouraged an' repinin' over what was mebbly my own fault, but I'll do it no more. You've taught me a lesson I ain't a-goin' to forget. You've been good children to us, and may the good Lord cause his blessing to rest upon you."

Then Bob went over to Polly and said gravely:

"Now, I've got something to say. Polly an' me's been partners in business so far, you know, an' we've made up our minds to be the same through life, Providence permitting. She al'ays had lots o' pluck, an' now she's showed us what one dear little woman can do, an' I was afraid somebody else'd get her away if I didn't, so—"

And then—

For us the story is at an end; for them it has just begun.

J. K. LUDLUM.

BIBLE FLOWERS.

THOSE unacquainted with the subject will simply be astonished at the wealth of floral imagery contained in the Bible, no less than the number of plants, flowers, fruits and shrubs mentioned therein, and of which, it may be noted *en passant*, not one-twentieth part is known to the average reader of the Scriptures. The Holy Land is one of those favored countries which, like the greater empire of the far East, might justifiably have arrogated to itself the designation, "Flowery Land." The indige- nous "flora" is rich beyond belief, even in our days. The wild-rose, varieties of free-growing lilies, sweet-smelling stocks, fine-odored mignonette, many-colored crocuses, gorgeous anemones, the bridal favorite myrtle, every species of gladiolus, pungent narcissus, and the yellow and white water-lilies have here their native habitat; they grow wild, and positively luxuriate in their freedom.

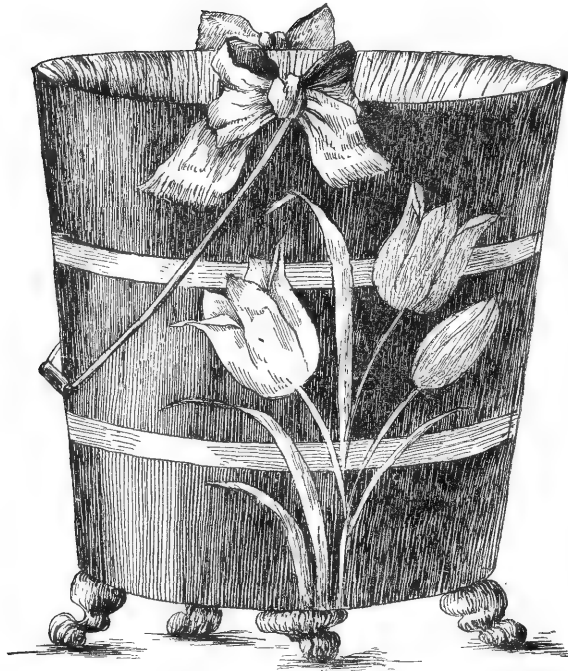
Even the wilderness, given over now, as in former times, to herds and flocks, is carpeted with gay-colored gems during the moist days of early spring. And in an-

cient times, as we shall later on show, many of these favorites were as carefully cultivated and sedulously tended as the most ardent floriculturist could desire. Naturally the Jewish poet and Hebrew seer made these "gems of heaven's own setting" subservient to their teaching. Their rarest images, their fairest allusions, their most telling illustrations, were culled from the fields. More intensely than the modern singer did the ancient Jewish writer draw from the transient flower and ephem- eral blossom lessons of enduring worth. Apart from this, the passion for flowers is eminently Eastern. To this day the Persian will sit before his favorite flower in mute adoration, taking a kind of sensuous pleasure in its beauty. And it is no detracting from this worship that he is probably sipping tea and talking scandal while his eye revels in its dainty color and graceful form. There is ample evidence to show that the love of flow- ers was a passion with the ancient Hebrews.—*Jewish World*.

Flowers are naturally simple and retiring; they rarely intrude on the notice of man; they bend over the brooks, lending and receiving beauty by the reflection; they peep out of the grass; they fringe the roadsides, and their masses of bright color contrast with the gray stones and

dark foliage about them; but they never insist on being noticed; they are always subordinate to leaves and branches and stems; and those that give the best and most enduring pleasure, combine modesty of appearance with delicacy of color and fragrance.—*Copeland*.

HOME DECORATIONS.



DECORATED PAIL FOR WASTE PAPERS.

Decorated Pail for Waste Papers.

EVEN wooden water-buckets are made to serve for ornament and use in the library, and, though for a different purpose from that for which they were originally intended, they will prove equally as serviceable, and are very ornamental also.

The white wooden pails, with brass handle and bands, are the kind used for this purpose. The wooden part of the handle and pail to be ebonized, leaving the brass untouched. The interior as well as exterior should be colored.

On one side of the pail a large bunch of yellow flowers and foliage is to be painted with oil-colors. Jonquils, tulips, yellow daisies or chrysanthemums can be arranged with good effect, and the color stands out brilliantly on the dark background.

Before painting the pail four brass claw-feet must be screwed in the bottom of the pail, thus raising it slightly from the floor, and giving it a much handsomer appearance than without feet. When the paint is dry the pail is ready for the lining, which should be of orange or

gold-colored satin, and be cut to fit twice round the pail, thus allowing sufficient fulness.

A strong gathering string is run round the top, and the satin gathered to fit inside the upper edge of the pail and the seam at the side joined.

The lining is then tacked closely on the wrong side round the top of the pail, the bottom edge gathered as the top has been, and turned down to fit round the bottom. A piece of pasteboard is then cut the exact size of the bottom, covered smoothly with satin and fastened to fit securely in the bottom of the pail, thus holding the side lining also in place. Bows of wide satin ribbon, orange or gold colored are tied at each side of the handle, and a prettier receptacle for waste-paper cannot be imagined.

Other coloring can of course be used, as, for instance scarlet or cardinal instead of gold, or light blue, pink and olive are pretty tied together, with a decoration of flowers the colors of which will contrast well with those shades, and the lining, of course, to harmonize with the color of the ribbons or flowers. These novel ornaments have the advantage of being durable, useful and exceedingly pretty.

M. E. WHITEMORE.

A Cloth Brush.

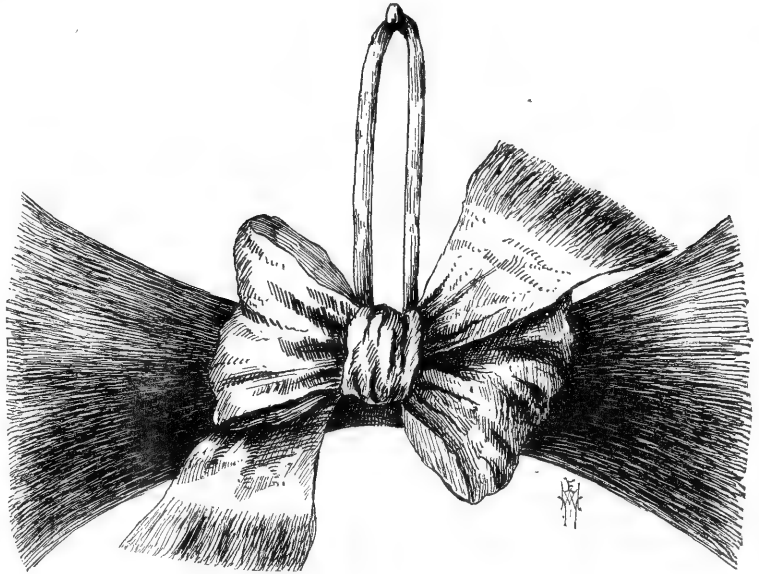
BLACK hair-cloth which is used, or rather was once so much in vogue, for covering furniture, is the material of which these little brushes are made, and they will be found serviceable not only for cloth, but any fabric for which a soft brush may be required.

A strip of hair-cloth is cut eight inches wide and one yard long, each side is fringed out three inches deep, thus leaving a solid piece in the middle two inches wide. Roll this fringed strip as tightly as possible, and sew it together with strong black thread.

A satin ribbon is tied round the middle with a full bow and ends, the ends of the ribbon fringed out about an inch and a half deep. A narrow satin ribbon, eight inches long, is sewed beneath the bow as a loop by which to hang the brush. Cardinal scarlet or blue are pretty, or two shades of narrower ribbon tied in two bows can be used, as, for instance, olive and shrimp pink, or olive and light blue.

The hair-cloth can be purchased from an upholsterer, and the brushes which are easily made will prove both pretty and durable.

M. E. WHITTEMORE.



A CLOTH BRUSH.

Rope Fringe.

THIS fringe is very easily made, and is an odd and novel trimming that can be used on fabrics which are too heavy for the lighter kinds of fringe.

It is usually, as the name implies, of rope rather a small size, such as is generally used for clothes-lines; it is also suitable and can be made of any of the heavy silk cords used for cloak garnitures.

The foundation, or basis, is a straight piece of rope the desired length, each end fringed out three or four inches deep to form a tassel.

On this piece the fringe or tassels are tied by doubling a piece of rope to form a loop. Hold it at the back of the piece which serves for the heading, the loop projecting above it. Bend the loop forward and over the head-

ing, then draw the two ends through it and pull to make the knot, which holds it securely in place.

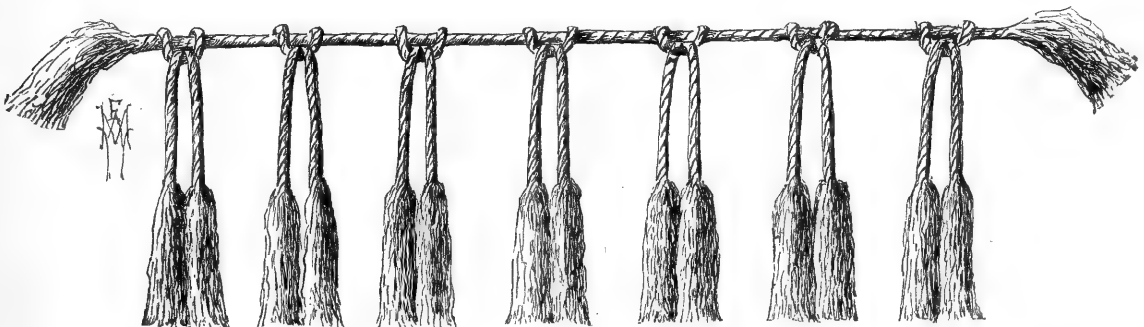
Repeat this all the way across, leaving between the tassels a space of two or three inches. The tassels can be any length desired, and should be fringed out about half way up, thus leaving a sufficient piece of rope for the knot. It is a very strong trimming and not at all difficult to make.

Rope fringe can be used with good effect on mantel lambrequins which are made of matting, and painted with floral designs and also on hanging screens.

It is also a very suitable trimming on articles made of linen duck which require fringe as a finish.

M. E. WHITTEMORE.

TARLATAN is much better to embroider on than paper; as it can be drawn out a thread at a time there is less danger of disturbing the embroidery. The design may be transferred to the tarlatan by means of impression paper. Have the design neatly and carefully drawn on tracing-paper, then put the impression paper between this and the tarlatan, then go over every line and dot with a sharp pencil. In this way you save the expense of stamping, and the cost of the paper is trifling. This method is especially applicable to embroidery on plush, velvet or satin.



ROPE FRINGE.

HOUSEKEEPING.

Caramel Cake.

Cream one cup of powdered sugar and one-quarter of a cup of butter, then add one-half a cup of sweet milk. Sift one and one-half teaspoonfuls of baking-powder and one and one-half cups of flour together twice and add it to the mixture; beat well, and then gently stir in the whites of three eggs beaten to a stiff froth. Bake in two layers.

To Prepare the Chocolate—Melt three squares of Baker's chocolate over the tea-kettle, and when the cake is almost cold, spread the chocolate on the top of each layer and on the bottom of one. The cream is to be spread *between* the layers.

The Cream—Two cups of powdered sugar and half a cup of milk. Let it dissolve; then put it on the stove and let it boil *hard* for five minutes, stirring it constantly, then remove and stir till it is stiff. It is now ready to spread between the layers, which have already been covered with chocolate. Flavor both cream and chocolate with vanilla.

Black Cake.

Four cups of brown sugar, one cup of sweet milk or sour—if sweet is used two teaspoonfuls of baking powder will be needed, if sour one teaspoonful of soda—one cup of butter, three cups of flour and three eggs.

Cream the butter, add the sugar, then the yolks of the eggs beaten well, then the milk, next the flour and the whites of the eggs beaten stiff. Last, dissolve three-fourths of a cake of Baker's chocolate in one cup of boiling water, flavor with two teaspoonfuls of vanilla and stir through the cake. Half this recipe will make a good sized cake.

Icing.

Two cups of granulated sugar, a little more than a half cup of milk, a piece of butter the size of a hickory nut. Dissolve the sugar in the milk on a cool part of the stove, then place it where it will boil hard for six minutes, stirring it constantly, then remove from the fire and beat till stiff and cool enough to spread on the cake.

Vienna Rolls.

Three cups of thin sponge before the flour is worked in, one-half cup of sugar, one-half cup of melted lard, one egg. Work in flour enough so the dough will not stick to the bowl and set it to rise. When light roll out one-half inch thick and cut with a large sized biscuit-cutter. Spread melted butter on one-half of each roll, fold over and set to rise again. When light bake in a hot oven. If wanted for breakfast the sponge must be made the afternoon before, and the flour worked in the last thing at night. It must be kept just warm enough for the dough to get thoroughly light by morning, when it can be rolled out as before directed. It should not take more than a half hour to get light enough to bake after it is made into rolls, but it must be put in a warm place.

Brown Bread.

One pint of sour milk or buttermilk, three cups of corn-meal, two cups of graham flour, one cup of molasses, one teaspoonful of soda, and half a teaspoonful of salt. Steam three hours in three one-quart cans with the tops removed by melting them off. They should be well greased. Three cups of graham flour and two cups of corn-meal can be used, or either rye flour or wheat flour substituted for the graham. It will be found much more convenient to cut the bread steamed in three loaves than if made in one large loaf, and it is quite a relief to find some way to utilize old tin fruit cans.

Boiled Black Bass.

Do not remove the head or tail, but have the fish thoroughly cleaned. Sew it up in a piece of mosquito netting. Put two tablespoonfuls of vinegar and one of salt into the water and have it boiling hot when the fish is put in. Twelve minutes for each pound will be sufficient time to allow for cooking. Remove the cloth and lay the fish on a platter, serve with it a drawn butter made with milk instead of water and add a little chopped parsley. In selecting bass remember the head is very large and there is considerable shrinkage in boiling and do not choose as small a fish as if it were to be fried. MRS. C. G. HERBERT.

NOTES AND COMMENTS.

Gladiolus.—But few of our readers are aware of the vast quantities of this popular bulb that are now grown, or the method of culture. Messrs. C. L. Allen & Co., of Garden City, N. Y., whose seed and bulb farm is at Jamesport, L. I. are by far the largest growers in this country. They have now under cultivation, and will harvest this season more than three millions of

bulbs. These are grown like any ordinary farm crop, the land being prepared in the same manner as for a crop of potatoes. The ground is made very rich for a previous crop, and but little manure is used when the bulbs are planted. The bulbs are planted in drills about three feet apart, the drills being made with a small plough, about four inches deep. The larger bulbs, those an inch or

more in diameter, are placed in the drills carefully, about ten to the foot. Smaller sized but flowering bulbs are scattered in the same manner as peas are sown, and just as rapidly, varying from fifteen to twenty-five bulbs to the linear foot. The bulblets are not planted as deep, only about two inches. These are sown very thickly, many of them touching each other, frequently more than one hundred to the foot; in fact, it is not considered a good crop unless the yield averages that number. Their experience has taught them that the bulbs do better when sown thus thickly than when they gave them four times as much room. With this manner of planting, the aggregate length of the rows planted is more than sixteen miles.

To keep this vast crop clean, and the soil in good condition for the growth of the bulbs, the cultivator is about the only implement used, and that is kept in constant use. But little if any hoeing is required, if the cultivator is kept steadily at work. If the weeds are not allowed to make the second pair of leaves, the hoe need never be used, as the cultivator, if properly handled, will cover all that are not rooted up, and to cover a weed with soil is as sure death to it as to root it up.

It does not seem possible that such a number of bulbs could be disposed of, yet we are assured that this firm have never yet had sufficient to fill their orders, which come from those in the trade exclusively, as they do not, under any circumstances, do a retail business.

* * *

Hardy Carnations.—Having had a season most favorable for hardy carnations the display has been unusually fine, in fact, rarely if ever equaled in this section of our country. While this flower is not as much at home with us as some others, yet it rarely fails to give great satisfaction. This year the flowers, in size and fragrance, have surpassed those usually grown in the greenhouse. It has been our good fortune to get a far larger proportion of double flowers than usual, although for our own pleasure we are quite as fond of the single forms.

As we are bidding good-bye for the season, and for all time, to the bed that has afforded us so much enjoyment this season, let us at once prepare for another. July is the month for sowing the seeds that are to give us flowering plants the coming year. The best plan we have ever tried is to sow the seed in good, rich meadow soil and protect with lattice that will about half shade the ground. Sow the seed thinly and press the soil firmly over them. As soon as they have made two or three pairs of leaves, transplant into the bed or border where they are to bloom the coming year. As soon as the ground is slightly frozen cover the plants, or rather the bed, even with the tops of the plants with newly-fallen leaves and no further work will be required to secure a charming bed of flowers.

We would add to these remarks that it is quite important to secure good seed, more so than in almost any other branch of floriculture. The finer varieties of carnations are far removed from the original types, the result of careful selection, cross-fertilization and good culture. To keep the flowers up to the high standard now attained, the same care and attention must continually be given them. This is, in the main, the specialist's work, and like

all other good work it is expensive. Therefore, in making a selection of seed do not buy any that is low-priced, for it is not cheap. If you cannot afford the best do not sow any; better by far choose some flower that is sure to succeed without much care than to hope for the best results with such seeds as can only be produced with the greatest care and expense.

* * *

Spiræa Filipendula.—This old hardy perennial is rarely met, yet is one of our best border plants. It grows from one to two feet high, and has creamy-white flowers (often tipped with red) in loose terminal clusters. The leaves are mostly on the lower part of the stem, and when the flower-stems are pinched off it forms a very effective edging plant, the fern-like aspect of its foliage rendering it very distinct from many other plants that are used for this purpose. Wherever a border of green is required there is certainly nothing better, and when in flower there are but few hardy plants more effective. It is rapidly increased by division of the tufts, which should be done in autumn.

* * *

Eulalias.—In speaking of this, the most useful genus of ornamental grasses, "J. C. C.," in *Gardening Illustrated*, says:

"Of these there are green and variegated forms—the variegated is the more attractive; the green form, known as japonica, is the more graceful of the two, as the points of the growth are more arching. The form *zebrina* has blotches, or bars, of a dark brown color, which run across the leaves at distances of from four to six inches; these are sufficiently clear to be seen at a distance. Contrary to the usual behavior of variegated plants, I find that the variegated form is the more vigorous of the two. One must not judge of the capacity of these plants to form conspicuous objects until they have remained in one position undisturbed for at least six years, and should they be planted in a poor soil, they will not develop their imposing character so soon as that, for here again the variegated eulalia differs from some other variegated plants. It grows vigorously in a strong soil, without showing any disposition to run back to the green state. Here, in the West of England, both forms of the eulalia are quite hardy—at least, they are so in our case, in a rather sandy, well-drained soil, which is well manured once in two years. The character of these eulalias is herbaceous, but if the winter is not very severe the growth lasts in good condition until the end of November. Our specimens reach a height of about five feet; I may mention that the variegation is so clear and bright that our plants are cut from pretty freely all the summer for household decorations."

Taking it for granted that the above is a true description of the eulalias, as seen in English gardens, and no one can doubt this correspondent's assertion, there must be something, either in soil or climate, that affects variegation very differently in that country from what it is in ours. With us the variegation of the *Eulalia zebrina* is a creamy white instead of a dark brown color, and the contrast with the bright green so marked as to be readily seen at a great distance. With us, in strong soil, the

plants attain a height of from seven to eight feet. Both forms are perfectly hardy.

We notice another difference in the habit of growth which seems a little strange. In our gardens, when a plant loses its variegation and returns to the original type, the growth is very much stronger, the foliage being twice the width and much longer, while in England the variegated form is the most vigorous grower.

* * *

Richard Parnell.—The death of Mr. Parnell, at his residence, at Queens, N. Y., May 18, 1886, has taken from us an old and well-known gardener, one who combined with his skill a thorough knowledge of the plants he grew. Mr. Parnell was born in Cornwall, England, September 13, 1813, and early evinced a strong inclination for horticultural pursuits. Commencing at an early age, he worked several years in the best establishments in that section; from thence he entered the gardens of the Royal Horticultural Society, where he remained until May, 1838, in the meantime passing his examination before Dr. John Lindley, who, on giving him a certificate of the first class, stated that he passed his examination in a very creditable manner. In the summer of 1841 he decided to try his fortune in this country. On his arrival at New York, September 25, he started for St. Catharines, Canada, where it was his intention to remain for life. But Mr. Thomas Hogg, Sr., having at that time many applications for first-class gardeners, induced him to come to New York a few years later, to take charge of the place that the late De Forrester Manice was laying out at Brushville, now Queens, L. I., to which place he removed January, 1844. Mr. Manice soon recognized his merit, and made a permanent engagement with him. He remained in that position until the spring of 1876. Some months previous to this, however, he met with a serious accident, which at first was apparently of a trifling nature but resulted in the total loss of sight and compelled him to resign his situation.

During the many long years of darkness (to him at least) his interest in horticulture never ceased, and it was his custom to have the contents of the leading periodicals of this country and of England read to him as soon as possible after their receipt, and in this way he was enabled to keep well informed as to the progress of horticultural affairs. When he first came to Oatlands (Mr. Manice's country residence) it had more the appearance of an ordinary farm than of a country seat, but under his care it soon became one of the finest in the vicinity of New York. In that place can be seen some of the grandest as well as the most rare trees and shrubs to be found in this country. Each and every plant on the place had for him a history, which he knew well, and at the mere mention of the name of any specimen he could give all the particulars of its growth on the place, together with all that was known of the history of the genus.

Mr. Parnell has left a widow, a son (our correspondent, C. E. Parnell) and daughter, who have the sympathies of a large number of friends.

* * *

Pansies.—In the last number of the *Farm and Garden* it is asserted "that it is now too late to sow pansy seed

with any possible hope for success." This is a sad mistake. The finest pansies we have ever seen in October were from seed self-sown in July. They had carefully secreted themselves among other plants for fear of being treated as weeds, and there, among lilies, tritomas and eulalias, we found as fine pansies as we had ever seen growing with the best of care; and these same plants gave us flowers in liberal quantities until the middle of November. It is not yet too late for a crop; get some good seed, start in partial shade, keep the plants well watered and fill the ground now occupied with early vegetables and enjoy them in autumn.

* * *

Queens County (N. Y.) Agricultural Society.—The annual spring exhibition of this society, held on the 16th and 17th of June, was one of more than usual interest. The exhibits were large, varied, and in all departments remarkably fine. For many years the directors have encouraged, by liberal premiums, popular floriculture, and whoever has watched the progress made cannot but be pleased with the result. At this exhibition the display of flowers, plants and floral designs, made by amateurs, was simply remarkable. Some of the floral designs would have done credit to any professional hand, while the plants that had been propagated and cared for by ladies only put to shame many specimens that we have seen staged by regular florists. This is, in a measure, the result of liberal premiums; at the same time it speaks well for home culture. Nearly all the plants and flowers in the amateur division were grown and shown by farmers' daughters, ladies of taste, culture and refinement, ladies that regard a beautiful industry one of the noblest accomplishments. We were pleased to see that two sisters carried off \$42 in premiums. It is a much better indication to see young ladies educated to do something rather than to know of something that some one else has done.

* * *

Striped Bugs.—We have never known this pest so troublesome on squashes and other vines as they have been this season, and we have never before exterminated them with so little difficulty. We inspected our vines one morning and found them literally covered with bugs. On our approach they arose in swarms. We at once applied Paris green in solution, very weak; the next morning the only evidence of bugs was the dead that lay thickly around, and not a live one have we seen since.

Answers to Correspondents.

Flower for Name.—*Miss E. L. D.*—The flower you sent was so badly wilted that its recognition was almost if not altogether impossible. We should think it was *Magnolia glauca*. Mr. Brackenridge, of Govanstown, could tell you by looking at a branch, and to him we can refer you in confidence to secure the trees you may want.

Rat's-Tail Cactus (*C. flagelliformis*).—*A Friend.*—We cannot say where this may be found for sale. Consult our advertisers' catalogues.

Books, &c., Received.

Ohio Agricultural Experiment Station Report for 1885. This report is one of the best that has reached us. All the reports of the doings of the various agricultural stations should be carefully read by everyone engaged in horticultural pursuits. They contain the information the farmer most needs, and such that he has but little time or opportunity to gain for himself. The reports of the actual experiments made in the growing of grains and vegetables, in the testing of seeds, and their adaptations to the various soils and situations, are of immense value and should be appreciated by those they are intended to benefit. Many farmers seem to have a strong dislike for any information that comes in a printed form, as though it were worse than the same truths spoken. To such we should advise sending for this report, and see how much it sounds like the talk of their most intelligent neighbors—their best farmers.

Proceedings of the American Forestry Congress, at its meeting held in Boston, September, 1885. This is another valuable report, which should be read by all, particularly by those indifferent about the protection of our forests, or ignorant as to their value and importance to the health and prosperity of our country.

Appendix to the Report on Agricultural Colleges and Experimental Farm Stations, with suggestions relating to experimental agriculture in Canada, by Prof. William Saunders, F.R.S.C. There is much food for thought in this report, we should advise a careful perusal by our Canadian friends.

Midsummer.

BEHOLD the flood-tide of the year,
The glad midsummer time,
When all things bright and fair are here
And earth is in its prime.

In fresh green woods the laurel hides
Her blushing waxen bloom;
And pink azaleas by the brook
Breathe spicy, faint perfume.

Wild roses by the dusty roads
Bud, blossom and decay,
Content to be, for joy of it,
The pleasure of a day,

This lovely world, how strangely sweet
It is! how wondrous fair
The starry daisies at my feet!
How fresh the summer air!

They bring a message home to me,
With tender meaning fraught:
The lowliest flower our Lord has made
Is worth a tender thought.

And each midsummer blossom-time
I learn the lesson o'er,—
This love of field, and flower, and vine,
And love of God the more.

—Abbie F. Fudd in *Good Housekeeping*.

LA BELLE FOUNTAINS.

ONE of the most interesting natural objects in America is the spring of water, clear as crystal and so large and constant as to merit the title "La Belle Fountain," which gives its name to Bellefonte, Pa. In all seasons, however turbid may be the waters flowing in the streams elsewhere, that sent out by this fountain is always pure and transparent, and always of about 38° of temperature. The favorite resort of visitors and citizens is to the head of the spring, a short distance above the town, where, peering downward through the depths of the crystals, they see an unceasing movement of the sandy bed through which the water rises, filtered free from all impurities. That sight is one full of suggestions to the thoughtful, and it forms a picture for the memory always pleasant to revert to.

Each one who reads this may recall some other picture of a spring among hills, which at one time or another afforded not only cooling refreshment, but pleasant thoughts. But everyone may not have considered that within the body in which he dwells there is a fountain, in which the stream is not clear as crystal, but scarlet in color, and of a temperature of sixty degrees higher than the water of the spring with which his thirst was cooled. In every moment of life this fountain flows. An irregular flow would be accompanied by discomfort and disease, and a ceasing of the flow would be an end to life. Therefore, this fountain with stream of scarlet is a much more interesting subject for thought than even "La Belle Fountain" of Bellefonte.

The scarlet fountain, the heart, is the starting point of the life. Into it the stream which it sends out returns, after making the entire circuit of the body, on its way adding new material to every particle of tissue over which it passes and taking up and carrying away with it every particle of worn-out tissue to the lungs, where the stream is purified—we might say filtered—by constant contact with a current of incoming and outgoing air. And right here is an especially interesting series of thoughts in reference to this wonderful point of contact between the current diverted from the atmosphere without and that of the life-blood within. One of these is the wonderful extent of the fine network-like air-cells over which the blood is outspread, exceeding in area the entire exterior surface of the body. Another is in reference to the striking change in the color of the stream on its entrance into and its exit from the lungs. From a deep bluish purple it is transformed to a bright scarlet. The quiet in which this ever-flowing fountain works in its hidden chambers is another of these thoughts.

Wonderful as is the human mechanism, from various causes it occasionally gets out of repair and the current of the life-blood flows irregularly.

Some twenty years ago a method of treatment to restore the bodily powers, which had been for nearly a century a subject of discussion, was entered upon and found exceedingly effective. Acting upon Nature's own suggestion, this effort was to give aid to the lungs in their work of transformation of the blood. The method was by inhalation, and the means used were the elements of the atmosphere readjusted. The proportion of the oxygen was largely increased and of the dilutants diminished, and the new mixture was named "Compound Oxygen."

Drs. Starkey & Palen, of 1529 Arch street, Philadelphia, are the physicians who have succeeded in this line of practice, and they have enrolled on their books the names of over twenty thousand patients.

Reports of results written by these patients indicate clearly that very many diseases yield to the power of this treatment. Its wide range of power can only be measured by those who will go over the records. Part of these are printed by permission in a brochure of nearly two hundred pages, freely mailed to all applicants.

—THE GOULD MEMORIAL HOME.—The memory of the brilliant gifts and the practical and tireless benevolence of the late Mrs. Emily Bliss Gould will not soon pass from those who knew her in New York city or in Rome. Especially will she be honored for her philanthropic work for the neglected poor children in the Papal city, for whose instruction and preparation for self-support she labored so energetically in face of priestly intimidation and obstacles that would have overpowered a less energetic soul. The work she established in Rome was carried on after her death by her husband, Dr. Gould, while he lived. It still bears her name, and is continuing the useful plan she initiated. Besides their elementary and religious instruction the boys are taught some handicraft in its industrial schools, and the girls are trained for domestic service. Many of the old pupils now occupy positions of usefulness, and some of trust and influence. The number of the inmates of the home has increased from twelve to an average of fifty, the annual cost for each child being about four hundred lire, or eighty dollars. The average annual expenses are about 24,830 lire, or nearly \$5,000. Since the death of Dr. Gould the contributions from this country have fallen off. The board of trustees in this city and the council in Rome, consisting of representatives of the evangelical churches there, appeal to Christians in this country for aid to this work, which has amply demonstrated its usefulness, but which is now sadly cramped for lack of needed funds. Contributions can be sent to Mr. H. B. Barnes, secretary, 111 William street, New York.—*Illustrated Christian Weekly.*

Colic in Horses & Cattle also Wind-galls & Sore cords are Cured by Perry Davis' Pain-Killer

Mr. W. H. WEST, of Glen's Falls, N. Y., who has had considerable experience with canal horses, writes as follows: "I feel it a duty I owe to send you my testimony of the great healing properties of Perry Davis' Pain Killer. Have used it continually for the past eight years, and for my canal horses have found nothing equal to it. It is the only thing to use on horses that are roading continually, for wind galls and sore cords. It is the best medicine ever made for a horse, used either internally or externally."

Perry Davis & Son, Prop's
Providence R.I.

N. B.—For colic in horses, half small bottle in a half pint of warm water or milk.

NEWSPAPER WAIFS.

—"I say," exclaimed a man as he picked himself up from the sidewalk, "what do you keep your cane dragging after you in that fashion for?" "Don't mention it," replied the cane-carrier, with calm politeness; "you haven't broken it; there's no harm done, I assure you."

—He was looking for a rich wife and thought he was on the trail. "I love you," he said to her in rich, warm tones, "more than I can tell you in words." "You'd better try figures," she replied coldly, for she was not so green as she looked.

—She—"There is no use denying it, Michael. I heard you tell mother that you had cleaned the steps and you have not." Michael—"Sure, I don't remember sayin' of it, miss. But I'll not be afther denyin' of it ayther, for phwat with havin' me hat over me ears I didn't roightly hear what I did say to missus."

—*Tid-Bits.*

—Lavina—"If I am going to have a flower-garden this season, you must get somebody to make the beds." Phasæsius—"All right, my dear. I'll drop into an employment office in town, this very morning, and tell them to send out a chambermaid." And, dodging the coffee-cup which she hurled at his head, he hastened around the corner.—*Detroit Free Press.*

—"Mr. Plumson, you talked in your sleep a full hour last night and kept me awake the whole time. It was dreadful." "Madam, what can you expect of a man who never gets a chance to say a word during the entire day?" "Well, sir, I never talk in my sleep, that's certain." "Quite right, my dear. I think it must have been your silence that started me."

—At this season hints and points on garden planting may be useful. First be sure that the toads have vacated their winter quarters, and that the worms are on hand for the early birds to catch, then proceed to plant crowbars and spades. These will not rot in the ground if planted too early, like most seeds.

Next, cultivate peas-ful habits. Get into brushes no other way.

Potatoes are now opening their eyes to observe things. Don't encourage this. Throw dust into and onto their peepers.

If you wish to raise early vegetables engage the assistance of the provision dealer, and save money by the operation.

—Among the many Trade-Marks which have been brought to our notice, none to our mind is more beautiful, striking or suggestive of the business it heralds than that of Messrs. LORD & THOMAS, the well-known Advertising Agents, of Chicago.

We have received from this firm a handsome Calendar with their Trade-Mark printed in colors. We cannot better describe it than by quoting the closing stanza of the parody on the poem, "Excelsior," which Messrs. LORD & THOMAS so happily adapted to their business:

"In field of blue, a globe doth roll,
While light doth shine from pole to pole,
From torch, upheld by Titan hand,
Above, beneath, this legend grand:
Advertise Judiciously!"

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PROF. FOREMUS ON

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Is made from the choicest quality of stock, and contains a LARGE PERCENTAGE of GLYCERINE; therefore it is specially adapted for Toilet, Bath and Infants.



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"I hain't seen nuffin of yer chickens. Do you took me for a thief? Do you see any chickens 'bout me? Go 'way dar, white man! Treat a boy spec'able if he am brack!"
THE POULTRY-RAISER, only 25c. per year, for 12 numbers of 16 pages each. Best Poultry paper in America. Send 2c. stamp for a sample copy. R. B. MITCHELL, 69 Dearborn st., Chicago, Ill.



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LADIES' FLORAL CABINET.

Volume XV.

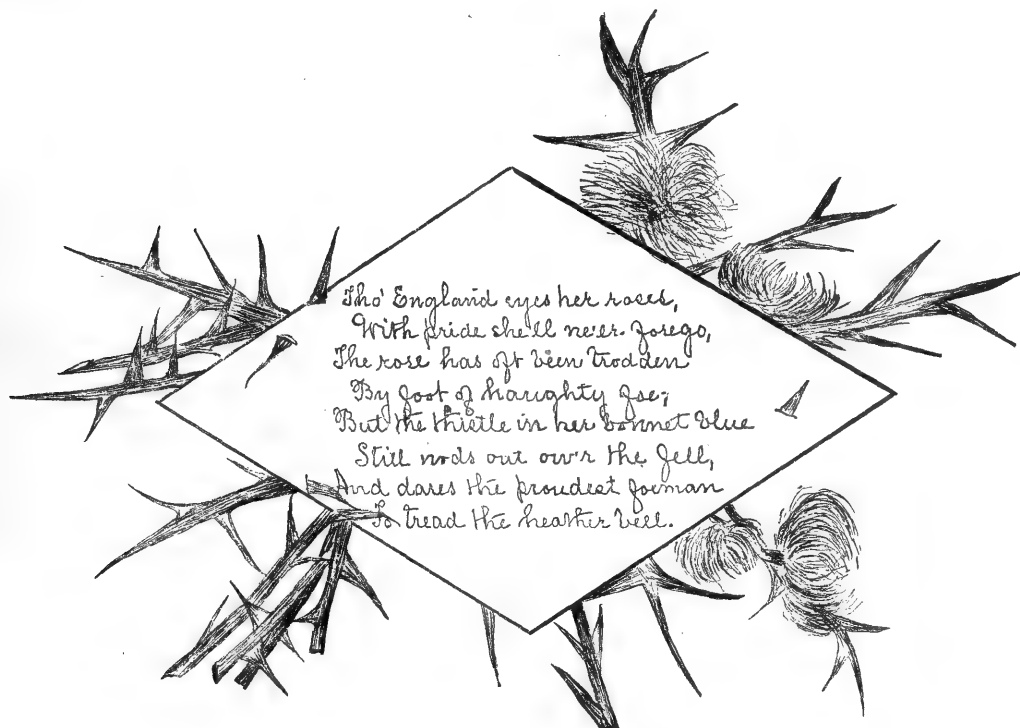
AUGUST, 1886.

No. 8.

BY MEAD AND STREAM.

TO a devoted botanist or an enthusiastic plant amateur New Jersey offers many charms, whether among the rocky hills of its northern counties or the monotonous pine barrens and salt meadows of the south. It is old and well-trodden ground now, but at least as interesting as when Kalm, in the beginning of the century, described the plant that bears his name.

"hunter's-cup" or "side-saddle flower" are some of its local names, suggested by its peculiar shape. "Hunter's-cup" has a very pretty Robin Hood suggestiveness; "whip-poor-will's shoe" displays a very bold flight of the imagination; "side-saddle flower" probably emanated from the brains of those who vilify our noble kalmia by calling it calico-bush. The sarracenia is in-



The salt meadows and silent pine barrens are not without their share of picturesqueness, and if one's botanical ardor fails in such localities there is always an adjacent swamp where innumerable botanical beauties are lurking, treasure-trove of the lucky finder.

Most swamp plants, by their oddities of form and habit, suggest an uncanny origin; some bring dreams of fairyland, with their delicate beauty, others suggest a darker necromancy. Take, for example, the common pitcher-plant, *Sarracenia purpurea*. "Whip-poor-will's shoe,"

deed an oddity, with its hairy-throated and purple-veined cups; and the flower is inexplicably singular in form, arresting immediate attention as the plant sits in its cool nest of soft green sphagnum. If I were a poet I would explain the "thusness" of the sarracenia in a more or less mystical ballad. It offers a grand opportunity for one of our poets of nature to distinguish himself.

Snuggling down by the side of the pitcher-plant is the shy little sundew, *Drosera rotundifolia*, a veritable mid-get to bear such a gigantic name. Its tiny, round leaves

are covered with auburn hair, and the plant itself always exudes a dewy moisture, which sparkles in the sunlight like the jewels in some Titian beauty's tawny locks. What an elaborate and poetic simile, and all applied to a tiny swamp plant! I must spoil its effect, however, by touching on a shocking piece of scandal related of this seemingly innocent plant. We are told, and that upon competent authority, that the depraved sundew is really at heart a cannibal! It figures among the plants described by botanists as carnivorous. I have never myself seen a ruthless sundew drag an unhappy collector to its lair, there to devour him like a giant Blunderbore, but this is probably owing to the fact that it does not exceed three inches in height. Another variety, *D. filiformis*—thread-leaved sundew—has, as its name implies, thread-like leaves, almost tendril-like, covered with hair, after the fashion of its round-leaved brother.

Down in the sphagnum, too, we find some few dainty orchids. There is the delicate mauve snake-mouth, *Pogonia ophioglossoides*, with its close ally, the pink *Calopogon pulchellus*. So near alike are the two, in growth and habit, only a few shades removed in color, that we must regard them as variations of one type, caused by some arrest of development in the dim past. Which was the original progenitor is as obscure as the ancient query as to whether the egg or the hen came first. At times, too, we meet with "ladies' traces," *Spiranthes cernua*, and the showy *Habenaria platanthera* is another adjacent member of the orchid flora. "Long purples" or "dead-men's fingers" the English country folk called members of this last-named family—unpleasant names to say the least. American local names are not so plentiful. Spreading her waxen bells above the swamp is the fair cassandra, commonly called leather-leaf, *C. calyculata*. It is a lovely thing, but why named after the prophetess of woe the botanical sponsor alone can tell. Its ally, the andromeda, is beautiful enough for the maid of classic story, though the name implies a somewhat far-fetched metaphor; according to one botanist the black swamp waters are the devouring monster overcome by the sun's heat, the Perseus of the captive plant. Whether this be the explanation or no, the name itself is as pretty as the plant, and that implies a great deal.

Up in the pine barrens, above the level of the swamps, the ground is more often carpeted with fallen pine needles and cool gray moss than with collectors' specimens. Next to the balsamic odor and piney carpet the most noticeable characteristic of these woods is the silence. At first it is restful; after a time it becomes oppressive. You gaze down long aisles of rough brown pillars, with the cool green arch overhead; there is the occasional chirp of a cricket or the idle buzz of a passing insect's wing. But the usual woodland chorus of birds is absent; there is only the regular tap, tap of a solemn woodpecker in his never-ending pursuit of food. Then comes the sighing wind through the tree-tops until, as Huckleberry Finn says, "you feel like as though everybody was dead." A dinner of herbs and a volume of Emerson always seems the most appropriate diet in the pine barrens. But here we get a heavier breath of spicy odor mingled with the balsamic air; it is the common lady-slipper, *Cypripedium acaule*. Quaint enough, it stands to inspire a dozen tales of woodland witchcraft, and nearby we are sure to find the spotted wintergreen, *Chimaphila maculata*—"orchid sign" we called it in our childish days; we had a fancy that it was always the herald of the lady-slipper. This is not properly a wintergreen. That name really belongs to the pyrola. *Chimaphila umbellata*—pipsissewa, as the Indians called it—is another charming thing with shining green leaves and delicate white flowers. Here, too, on the edge of the pines, I found one solitary clump of the hoary pea, *Tephrosia Virginiana*. It is an odd thing, with its silvery leaves and pink, leguminous flowers. Singularly enough, this one clump is the only growing specimen of the plant I have seen. It is rare and unusual, and presents all the characteristics of a New Holland plant, dropped, by some strange freak, into New Jersey.

In these Jersey swamps the toothsome cranberry is found. Though extremely hardy,

"'Tis such a wee, fair, dainty thing,
You'd think a greenhouse warm
Would be its proper dwelling-place,
Kept close from wind and storm."

E. L. TAPLIN.

ORIGIN OF THE PERPETUAL CARNATION.

IN a recent number of the *Revue Horticole* a very remarkable article was published on the perpetual carnations in their present state. But the writer says: "Where and how was the culture of the perpetual carnations commenced? Who is the horticulturist who first did addict himself to it? We do not know." I therefore think that it may interest horticulturists and amateurs to be informed, and I, in consequence, send a copy of their history published ten years ago in the journal of our horticultural society, which had not a wide circulation. According to several horticultural writers, the carnation was cultivated more than 2,000 years ago; but we know nothing about what was practised about those

times—no more in horticulture than any other science—and as it is only since the beginning of this century that the facts of nature have been studied, we can only relate what has been observed lately.

The perpetual carnations have been created—created—at Lyons. It was M. Dalmais, gardener of M. Lacene, a celebrated amateur and founder of the first horticultural society in Lyons, who obtained the first real constant-blooming carnation, about forty-six years ago. He sent it out in 1844, under the name of *Atim*, the produce of artificial fecundation of a so-called species, known by the vulgar names of *Cœillet de Mahon*, or of *St. Martin*, because it was regularly blooming by the middle of Novem-

ber, fecundated by Œillet Biohon. This first gain was successfully fecundated by the Flemish carnations, and about 1846 he obtained a great number of varieties of all colors. Mr. Schmitt, horticulturist, at Lyons, followed M. Dalmais, and obtained several fine varieties like Arc-en-Ciel and Etoile Polaire, which were cultivated for several years, but no longer exist, having been superseded by finer varieties.

But in 1850, a disease having destroyed the collection, Mr. Schmitt abandoned that culture. Soon after Alfonse Aligatiere, the well-known and zealous propagator, undertook the hybridization of carnations, and in a short time obtained a great success, and added to that series a great many varieties, all particularly dwarf, and obtained a great improvement by creating those with stiff flower-stems, about 1866. We can thus say that Aligatiere has

created a new species. He has also upset the old system of propagation—that of layering—and has proved that the best and most reasonable method is by cuttings, and that layering is the infancy of horticultural art. Nothing, he has proved, is easier than propagating carnations from cuttings.

The best time to strike them is January and February, and the best mode is to put them in fine sand on bottom-heat at about 60° to 70° of Fahrenheit, without bell-glasses, in a double-spanned roof house. The cuttings must be syringed every day and the sand kept moist. They will be rooted in three or five weeks and must be planted out in April or May, and will make fine plants to bloom in autumn. About September those that have flower-buds can be potted for indoor decoration.—*Jean Sisley, Monplaisir, Lyons.*

INSECTS AND THEIR PREVENTION.

A STRANGE incident occurred this last winter in connection with my greenhouses, and although I cannot explain it I will give you the circumstances connected with it, so that you can judge for yourselves. This last winter I only smoked my houses once with tobacco for green-fly, and that not for any appearance of it, but as a preventive, always believing that prevention is better than cure. No appearance of green-fly was ever seen during the remaining portion of the winter, which to me seemed very strange. Nothing but the precautions I took to prevent them can I assign as a reason. During the summer I always see that the houses are thoroughly cleaned in every crevice, either by paint or washing; in fact, everything is refreshed during this season. If plants are in the houses they are looked over and washed, all old soil removed from the top of the pots and fresh added, and, above all, the flower-pots are made clean, not only because they present a better appearance, but because much insect life is often attached to them. We all know that there are some species of plants that are greater favorites with green-fly than others; such plants I keep in the lowest temperature, as I always judge that when plants become much affected a lower temperature will suit them better. We have many long-standing notions about plants, and when one is said to be a stove-plant then we think it must be treated as such. I have changed my opinion in regard to many of these, and find that, when given a colder atmosphere to live in, in most cases I have increased the strength and vigor of the plants; and this is no doubt a great help in overcoming the attacks of insects, as a heated and impure air is the favorite resort of most of these pests.

Some persons contend that a strong, healthy plant, growing vigorously, is not so liable to attack as when growing slowly. In this I do not altogether agree, although they produce as proof that when plants come into full vigor in the spring the insects disappear; but if they were confined in the same close atmosphere as in winter I do not think their condition would be much altered.

That which has most to do with it is perhaps the introduction of plenty of fresh, bright, sunny air, which seems to render the insects so soft (so to speak) that they melt away under it. Prevention, as much as lies in your power, is the best and truest method of battling with those insects so detrimental to success with inside plant culture. The results that have followed my precautions this past winter in the freedom from insect pests I can attribute to no other cause than to the precautions I took as a preventive.

It is best to start a fresh lot of all soft-wooded plants, such as coleuses, geraniums, heliotropes, fuchsias, &c., to renew the stock as far as you can, as a second year's confinement reduces the vitality in a more or less degree, and your reward will be a fresher and more luxuriant growth, better and freer flowering plants, with the chances of insect life and disease greatly reduced. For there is no doubt that continued forcing is the cause of much failure. It is also wise to examine even new cuttings and cleanse them. There are many plants with which this renewing system cannot be practised, such as crotons, palms and others, which require years to bring into perfection or beauty, but these should undergo a thorough cleansing process before you commence your winter fire heat. My remarks may appear trifling and, perhaps, troublesome to many, but the reward is a pleasure when you have your stock in fine, healthy condition. How often do we see plants eaten up by insects and in a puny, sickly-looking state, for, no matter how healthy the root may be, if the leaves and stems are covered with insects you must not expect good results.

My houses were not only free from green-fly, but also from other troublesome insects, such as mealy-bug and red spider, the three greatest enemies with which I have had to contend. Red spider will never be troublesome where a proper moisture, conducive to the health of plants, is kept.

N. ROBERTSON.

GOVERNMENT GROUNDS, CANADA.



POPPIES.

WILD POPPIES.

FOR the wild garden the poppy is an indispensable flower, one that cannot be made useful in any other situation, because it does not last long enough for bouquets, and if it did, its disagreeable smell would prevent its use for that purpose. It would seem that nature has provided the poppy with a disagreeable odor as a weapon of defense. We are pleased with this wise provision, because it secures us one plant that can grow to its heart's content without molestation; it can smile for all and at all, but it is a beauty that is unapproachable.

There are two distinct classes of poppies, and both of them are common to many gardens. The annual species includes some flowers of rare beauty, well worthy of general cultivation. It is from this class that our sketch was made. And in the locality where grown they are considered "wild flowers," as they reproduce themselves as freely as any of our native plants. They are, in fact, weeds; having become naturalized from Europe, they grow here as vigorously as in their native home.

The Oriental poppy is the handsomest of all the species,

and is one of our most valued hardy plants. Its perennial character makes it more desirable on many accounts than any of the annual species. Of this there are several varieties, the one known as *Papaver bracteatum* being superior in size and attractiveness. This variety forms huge masses of handsome foliage; the flowers are borne on stiff stalks about three feet high, and are of an intense

scarlet color, with a purplish black spot at the base of each petal. This class will thrive almost anywhere, providing the plants are not disturbed; they are impatient of removal, and will grow for years in the grass or other neglected places if left alone. A group of these in the border produces an effect that is otherwise difficult to obtain, and one that is highly important.

POPPIES.

DO you know why the poppies are always
So drowsy down in the corn,
Half folding their red umbrellas
On the merriest summer morn,
And nodding so, on their couches low,
Like people at bedtime all in a row?

Why, you see they once were fairies,
When the gray old world was new,
And the good queen one fair morning
She sent them out in the dew
With a message wise for the dragon-flies,
Who lived with some lilies as blue as the skies.

But they loitered on their journey,
They played with the birds and breeze,
They lost their way in the meadow,
Chasing the busy brown bees;
Then they took long naps in the airy laps
Of the shadows under the wheat's gold caps.

And the queen whose stately message
Was lost and forgotten quite,
So angry grew that she hastened
To change with her sceptre bright
Each faithless fay to a blossom gay,
And there in the field they must always stay.

"Wings never are wanted, surely,
By those who love lying in bed,
And freedom is only for people
Who know how to use it," she said;
"And the world would go better I know
If all such vagrants were punished so."
—Susan Hartley, in *Portland Transcript*.

FLORAL NOTES.

HONEYSUCKLE HALLEANA.—We have only words of praise for this climber. Last year a wee plant was set out and it grew about eight feet during the season, sending out also side branches profusely. It bore perhaps a score of blossoms. As it had overtopped the trellis, in the spring we cut it back nearly three feet, and now it has thrown out a mass of shoots which hang over the trellis several feet, and the whole vine is a mass of graceful branches from root to top, heavily laden with blossoms which grow in pairs from the axils of the ever-green leaves all along the branch, which, as it grows, puts forth new buds, so that the vine is constantly in bloom. The flowers are first pure white, then change to a delicate buff, deepening later to an intense buff, so that the honeysuckle is covered with flowers in three different hues. The effect is lovely. When we tell you that this very desirable climber is priced at a dime only, you will all want it.

Aurea reticulata, or golden-leaved honeysuckle, we greatly admire for its foliage, so netted and veined with yellow as to give it its name. We have never had it in bloom, but the flowers are said to be yellow and fragrant. The honeysuckles in variety are among the most beau-

tiful hardy vines in cultivation. The botanical name is *Lonicera*, named for Adam Lonicer, a German botanist who died in 1596. The Tartarian honeysuckle is of a compact, shrubby habit, flowers early in May, and bears orange-colored berries during the summer. The monthly fragrant, or Dutch honeysuckle, is one of the best for a trellis or pillar; color, buff, yellow and red; it is a constant bloomer.

LOPHOSPERMUM SCANDENS.—From *lophos*, a crest, and *sperma*, a seed, referring to the crested wing of the seed. This is a tender climber, admirable for a pot trellis or for planting out in a sunny position where it can be trained against a wall or fence. It is a very rapid grower, attaining a height of from fifteen to twenty feet in one summer. It bears large rosy-purple flowers, greatly resembling gloxinias in shape. When growing in a pot it has to be cut back frequently. Requires rich, mellow soil; grows from cuttings or seed.

THE LONGFELLOW DAISY.—We are greatly pleased with this new daisy. It bears large flowers of a dark rose color on long stems, which render it admirable for cutting. "Morning Bride" is a new white quilled daisy; "Crimson Button," large, dark crimson color; "Victoria,"

red and white. Daisies are best in May and June, but bloom constantly, and during the cool days of September increase in size. We greatly admire them for edging the flower-beds, and a clump taken up in October and potted will furnish flowers during the entire winter. As they multiply very rapidly from the roots, it is needful to divide them every year.

FOXGLOVES.—For the background or among the shrubs what can be finer than the *digitalis* or foxglove? Ours have been very rank this season, some of the spikes growing more than six feet in height and bearing nearly a hundred of the curious thimble-shaped flowers. We have them of pure white and various tints of purple, with mottled thorax. They continue a long time in bloom. Many new plants come up yearly from self-sown seeds. They are also increased by division of the roots.

DELPHINIUMS.—Never have we seen the perennial delphiniums or larkspurs in such luxuriant beauty as those from seed sown last year. They are very stout and tall, six or more feet in height, with numerous branches laden with flowers. There are eight varieties, shading from the palest blue to deepest, and also purple tints. The blossoms vary in form and size, as well as the growth of the plant. As the main spike blooms long before many of the side shoots, it is best to cut it off after the flowers have fallen, and thus the strength that would go to the ripening of the seeds will be diverted to the buds and develop them in greater perfection. We have long prized the annual larkspur in blue, white and pink colors for cut-flowers, but we are delighted with these beautiful perennials so rich in blue, a color rare among flowers suitable for bouquets.

M. D. WELLCOME.

HARDY HERBACEOUS PLANTS.

THIS has been an exceptional year for the herbaceous border. Such a June we do not remember; cool and moist, the two conditions essential to the perfect development of hardy flowering plants. A continuation of such seasons would make this class of plants as popular here as in other countries, where they are the rule instead of the exception. We have often been told by English gardeners that in this country we did not see the herbaceous border in its full beauty. Of course we did not believe this any more than we do the thousand other reports that we get of the excellence of certain plants when placed in positions congenial to their tastes and necessities. We remember well the day when, in talking of the Japan irises, our friend Thorpe told us that we must go to England if we wanted to see the iris in its integrity. We accepted his statement with a fair share of mental reservation, at the same time thinking to ourselves that it is a good indication to see a man stand up bravely for home, with all its endearing associations. Yet we quietly entertained the opinion that, if better irises were to be seen in English gardens than in ours, they must have some very good ones, and here the matter dropped. But it would not rest always. While we could not dispute with our friend, it was impossible to realize the facts as stated. However, we doubt no longer; the evidence is before us. We could not go to England, but her June came to us, and we find all that was told us to be true, both in regard to size and color-line. No, we never before knew what the iris (Japan) was; we had not the slightest conception of its capabilities. But a few days since we had the pleasure of going to a nursery where this iris is grown largely. And such a treat! Here were rows 250 feet long of one variety, and, whether by accident or design, the colors blended so beautifully as to make the field look like a picture, as it in reality was, but nature held the pencil, giving life as well as color. Here we saw a row of *I. virginialis*, a large, double, white flower, with a slight golden band at the base of each petal. The flower stems were fully four feet in height,

producing flowers nine inches in diameter, with the three inner petals nearly as large as the outer ones, giving the flowers as complete a circular outline as is shown in the petunia. In this field there were some twelve entirely distinct varieties, all of the same general character, varying only in colors, which were from pure white to dark indigo-blue, rich purples, violet-marbled, margined white, bluish white, brownish maroon and pale blue with white centre, the typical species.

A field like this, with thousands of flowers, was a sight baffling description. The smallest flowers here were far larger than any we had before seen, and fairly put to shame our doubts regarding the glory of the iris as seen in English gardens.

This iris (*Kämpferi*) is a very easy subject to manage; it will grow in almost any soil, but prefers a lively loam. The situation must be a moist one, or, in ordinary seasons, in this climate, the flowers will not come up to the expectations of those who have seen them growing under favorable circumstances or have read truthful descriptions of their size and beauty. The soil should likewise be very deep, as the roots will go down two feet in search of moisture if it is not provided for them nearer the surface. To secure moisture a liberal mulching is desirable. Unlike most plants so fond of damp situations, it dislikes shade, and thrives best in a hot, airy situation. Propagation is easily effected by division or from seed. If an increase of some choice variety is desired, divide the clumps in autumn, and we advise separating the clumps as often as once in three years, and changing the situation. If left longer standing they die out in the centre and do not make vigorous flowering shoots on the outer sides.

Plants from seed are easily secured, and in no class of floriculture are seedlings more interesting. Sow the seed as soon as ripe in good, mellow soil, and it will vegetate the following spring and flower the second season. Among the seedlings an endless variation of colors will be produced; in fact, from one seed capsule there will

come white, blue, maroon and finely variegated flowers. Care should be taken in transplanting from the seed-bed, as the plants must become well established before they will produce fine flowers, and their true character seldom becomes fixed before the second season's flowering. We should advise amateurs to sow the seeds in pots, which can be put in any out-of-the-way place where the soil will remain moist. Bring forward in January, and by the time to plant out the seedlings will be sufficiently strong to make good flowering plants the coming season.

Other hardy plants show as great superiority over those of former years as is noticeable in the iris. The delphiniums, for instance, have furnished us with spikes of unusual strength and length, and with their size may be added intensity of color, the latter being more the result of quantity and health than from any real improvement in coloring, for the delphiniums stake all their reputation on color, and hold fast to that if there is but a single flower to show it. All of the delphiniums contribute largely to the beauty of the garden, the annual as well as the perennial species; the perennials, however, are of far greater importance, and when seen, as they have been this season, growing from four to seven feet high, with massive spikes of bloom from two to three feet long, they are objects of special interest. Their ease of culture is a strong point in favor of general cultivation. They will bloom the first year from seed, if it is sown early, in pots, boxes or frames, and planted out in June.

Among other hardy plants worthy of special mention that have felt the good effect of the cool, moist weather of the past June we notice hardy carnations, one of the most useful early summer-flowering plants, and one that is sadly neglected; dianthus, other than carnations, more commonly known as China pinks, have done remarkably well; also campanulas, in variety, and helianthus.

Liliums have been remarkably fine and unusually healthy, the former undoubtedly being the result of the latter condition. June can hardly be considered the

month for lilies, yet there are many varieties that bloom the latter part of the month, prominent among which is that best known and most beautiful of all lilies, *Lilium candidum*, the old white lily of our gardens. This has done admirably, and thus far no appearance of blight has shown itself. *Lilium tenuifolium* is a most elegant lily and one of the earliest. Its flowers are fiery red, with a wax-like appearance; this delights in a moist, deep soil, and in just such an atmosphere as it has been favored with this year. *L. monadelphum*, usually a shy bloomer, has been most generous with its large, pure, yellow flowers of a peculiar fragrance. *L. Brownii*, which has long, trumpet-shaped flowers, creamy white inside and rich, brownish-purple markings on the exterior of the blossoms, and its ally, *L. Japonica Colchesteri*, with its immense trumpet-shaped flowers of inexpressible form, inside snow-white, outside chocolate with a golden ground, have flowered as freely as any of the many forms of *elegans*, a class of lilies remarkable for their hardiness, free-flowering habit and showiness. The many varieties of this class are usually included under the head of *Thunbergianum*. One of the most remarkable of these is Alice Wilson, a garden variety of extraordinary merit. Its flowers are very large, erect, of clear canary-yellow color. This plant, like others of its class, is perfectly hardy, and is entitled to a prominent place in every collection of lilies.

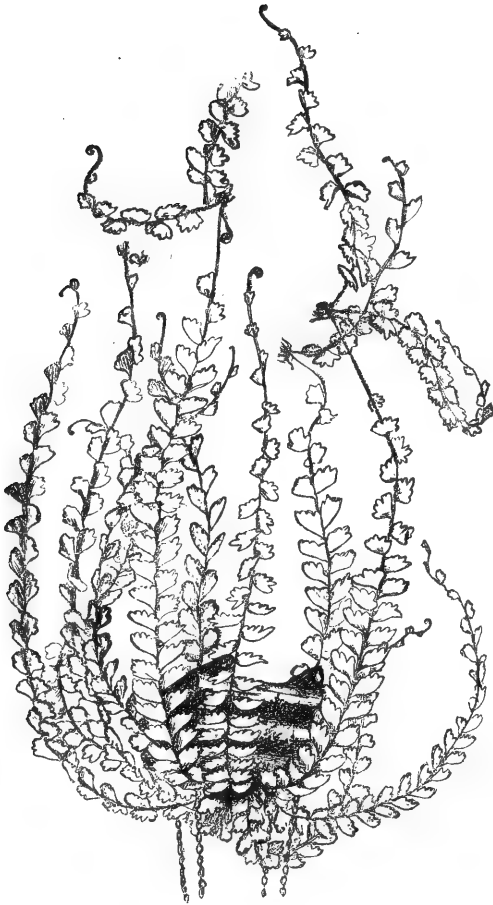
There are many other lilies, as well as other hardy herbaceous plants, worthy of mention, but we trust enough has been said in favor of the latter to tempt their cultivation on a scale commensurate with their worth. Certainly a choice selection of hardy herbaceous plants suited to any garden can be made that will furnish flowers during as much of the season as vegetation can live out of doors. Their beauty cannot be excelled, and they can be secured at much less expense than the fashionable flower-garden costs, which is only seen at its best during a few weeks of the year and never in June, the most delightful month.

FERNS FOR THE WINDOW GARDEN.

ONE of the most common causes of failure in window-gardening is unsuitable selection; in fact, this is the principal cause, for it is not possible to find a situation where man can live that *some* species of plants will not thrive. In our selections the "color line" is generally the barrier to success. We will insist upon having scarlet pelargoniums or some other class of flowering plants that will not succeed without more light and sunshine than the usual living-room affords. There are many, perhaps the great majority of our friends, "that cannot live without plants in the house in winter," and often their plants do not look very happy, however much happiness they may afford their owners. Plants that have reveled in the sunshine and our rare atmosphere during summer, when brought into the living-room soon begin to look dyspeptic; they lose their strong, healthy leaves and take on long-drawn, emaciated forms, worthy subjects for the fresh-air fund.

For rooms where there is but little light, where the sun's rays only make a formal call during the day, ferns will thrive most luxuriantly, and, what appears strange, those that are really the most beautiful seem to thrive the best. As a family, the adiantums surpass all the other ferns for graceful beauty, and of these none compare with *A. Farleyense* and *A. gracilis*. These two we have grown with perfect success in the sick room, when at times there would be but little light and never any sunshine the entire winter, and we have had plants grown in the house that would have been given a prominent position at a fern exhibition. In the same situation no flowering plants could be induced to grow; in fact, none were wanted, for none are as cheerful or furnish as quiet repose for the eye and head, weary with suffering, as the delicate adiantums.

To the list of valuable adiantums for the living or the sick room we notice in *Gardening Illustrated* an



EDGEWORTH'S MAIDENHAIR AS A BASKET-PLANT.

illustration, which we reproduce. It is described as follows:

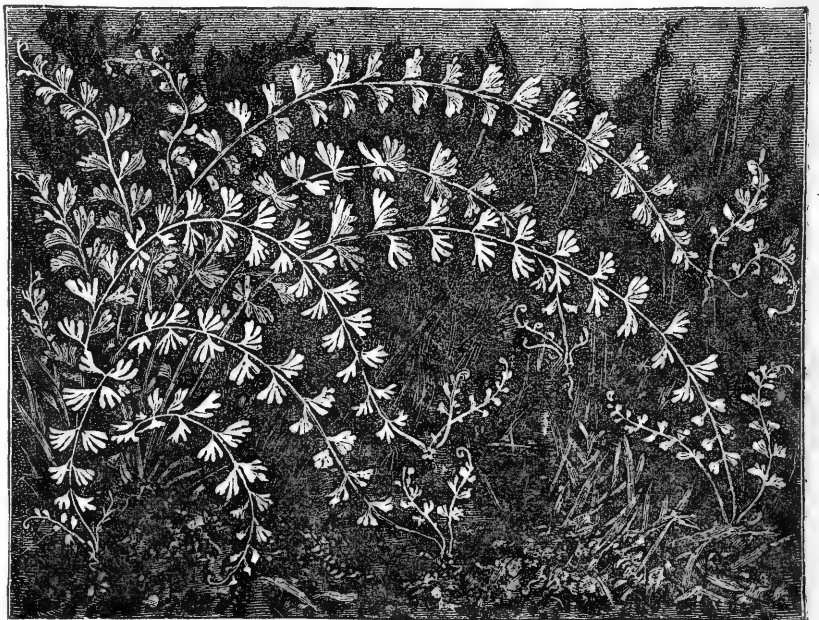
"Our illustrations show a most beautiful maidenhair fern, which possesses characteristics which make it especially interesting. One of the most striking peculiarities belonging to certain ferns is that of being proliferous, or viviparous, and thus reproducing themselves by means of young plants developed on the apex of their fronds, or over the entire surface of their foliage. This character is possessed to a great extent by aspleniums and polystichums, and in the genus *Adiantum* there are four proliferous kinds. Of these *Adiantum Edgeworthi*, or *aliatum*, as it is called, is, although the smallest of the four, the most interesting; its delicate fronds, when young, are adorned with a lovely, pinkish hue, which none of the others possess, and which gradually shades off into a pale, grayish green, thus greatly enhancing their beauty. It is particularly well adapted for growing in hanging baskets

of small dimensions. Thus treated, the graceful habit of the plant is well shown off, as well as the way in which the young plants are produced at the ends of the fronds. This maidenhair is a stove-plant, and a shallow-rooter, requiring, to attain its full development, but little soil, and that should be of a very light character; peat and sand, or sandy leaf-mould, are the most suitable materials in which to place it. Although particularly fond of a moist atmosphere its fronds must not on any account be wetted; they become black and show signs of decay if in immediate contact with water for any length of time."

If a climbing plant is desirable for the house, none is more beautiful or more easy of management than the *Lygodium scandens*, a Japanese species introduced in 1830, but not until recently has it become commonly cultivated. While it is a favorite in the greenhouse and most useful for decorative purposes, it is well adapted to house culture, as it requires but little light, and is not injured by gas or furnace heat, so fatal to most plants when brought into the living-room. It is a rapid grower, and, with proper management, it can be made to complete its growth in summer, after which it can be introduced into any moderately cool room in the house, where it will remain an object of beauty the entire winter.

In the spring all the old growth should be cut away when new fronds will make a vigorous growth, provided the plant is given a shaded place and humid atmosphere. In such surroundings it will attain a height of eight feet, the mass of fronds being fully six inches in diameter. For training round a bay window we know of no plant that combines so many good qualities, its power to resist abuse being not the least among them.

There are many other ferns that thrive well in the living-rooms, and we shall notice some of them from time to time.



EDGEWORTH'S MAIDENHAIR FERN.

NOTES ON LILIES.

A WEEK ago, after a month's absence in Scotland, I looked over our lilies. My friend, Mr. McIntosh, many years ago established the fact that, whatever the season may be, *Lilium auratum*, and many other species, will bloom well year after year if planted among healthy rhododendrons, the reason, I believe, being that the rhododendron leaves shelter the young shoots from April and May frosts, and from what is still more dangerous, bright sunshine after frost. When gardeners speak to me about difficulties with lilies I recommend them to keep to this safe ground—that is, when not many dozen plants are required; but as our experiments have for years past been in the direction of growing lilies more in masses, and as this has been an unusually trying season, I think that you may like to have some of the results at which we have arrived.

Having acquired a strip of wood at our cottage garden near here, we, three years ago, dug out the soil for some large beds about five feet deep, made a sheltering bank of the natural soil, filled up the holes with good lily soil, and planted a number of *L. auratum* bulbs. These were successful; therefore the following year we made similar beds and planted them with *L. auratum*, *L. speciosum*, *L. tigrinum*, *L. elegans*, *L. Krameri*, *L. Batemaniae* and *L. longiflorum*. These prospering, we last year made another large bed and planted it with *L. auratum*. In all these beds the lilies looked as healthy, with the exception of *L. longiflorum*, as if they had had the advantage of rhododendron shelter. There was no protection overhead, but the surrounding wood was thick enough to protect the plants from the bright sunshine in May which followed the night frosts.

At Oakwood, Wisley, two beds in which *L. auratum* had come up constantly stronger, in one since 1881, the other since 1882, have a good many lilies damaged; some *L. cordifolium*, which had fine strong shoots at the

beginning of May, were killed to the ground, while *L. giganteum*, just opposite them, had the leaves, which were then developed, frosted and looked bad. They have, however, thrown up their flower-spikes, and hardly show where they were damaged. I think it may be taken as a fact, from our experience of now a good many years, that *L. cordifolium*, unless planted where evergreens will protect it from sun after spring frosts, requires the protection of fir boughs or similar shading. I had an instance of the efficacy of light protection in the case of two lots of *Vallota purpurea* planted near the water's edge; over them we placed common wicker coops, with bracken interlaced; most of the bulbs are all right. A wren made her nest in the fern of one of the coops, and brought out her young. Even some of the North American lilies, *L. pardalinum*, &c., have some shoots frosted, though in some beds these lilies are untouched.

In the narrow field of *L. auratum*, where the protecting cut-furze fences are not high, so giving but little protection from weather, most of the lilies seem to have done better than where they had more, though insufficient, shelter. For some years past the weather has not been severe enough to try lilies fairly, but I think last winter may be taken as above an average one, as a test. We planted *L. tenuifolium* in all sorts of soils and situations; it has bloomed in all, though with different strength; it will require another year on the ground before the best treatment can be ascertained.

I will close this note by saying that a few days back I saw a stem of *L. Krameri* in one of Mr. McIntosh's rhododendron beds with nine flower-buds; it may be remembered that when this lily was introduced it was considered one-flowered. I ventured to predict that when strengthened it would have more flowers, but no one ever dreamed of nine.—George F. Wilson, Heatherbank, Weybridge Heath, England, June 26.

IN A PASTURE.

WE have always pitied those unfortunates who have only learned to like the country when they have found leisure to make holiday late in life. They miss the lingering fragrance of those bright early associations, which are revived by sights and sounds and scents to the country-bred boy who has passed a busy working time in cities or abroad. To him the cawing of the crows or the call of the cuckoo, the first violets of the spring or the fragrance from the fresh hay-fields, will bring back a rush of happy memories. Oh, ye country-bred youths who murmur at your lot, to you will come the time when you will look back upon the experiences of this early time and thank God that the grass sprouted green for you and the birds sang and the rivulets murmured their dulcet-rhymes.

When the world was new the dwellers therein loved the soil. In the songs and legends of all the early peoples the student finds constant allusions to this natural reverence for the earth. The old story of the giant who received tenfold strength every time he was thrown upon the bosom of his mother earth represents a grand truth. And to own a piece of land, to feel that it is ours, is a pride that we should not be ashamed to own; for it is a right good feeling, whether found in man or woman, a natural, true instinct for our dear old mother earth, for the trees and the grass that will grow for you, for the wild flowers and the birds that will make your small portion of the globe their home.

To me the experiences of my boyhood in my country home are delicious idyls. The recollections of the early

spring mornings, the wanderings in dewy meadows and shaded lanes, the delightful sounds of rural life—the lowing of the cattle, the singing of birds, the swish of the mower's scythe, the tinkling of bells—all those echoes which Gray in his immortal "Elegy" has glorified by song hold a world of boyish romance. With all the old Greek stories in my mind of the Hesperides and Alcinous' gardens at Scheria, and the golden apple of Apollo growing beyond the farthest confines of the sea; of the Roman pastorals, Cincinnatus and his little farm, and Virgil tending the bees at his country villa; of the old Sabine left among the hills when golden Saturn led the earth, and the dreamy idlesse life of the mediæval monks amid their wheat patches, their peach gardens and strawberry beds, under the shadows of gray, old monasteries, more precious than all these memories are my recollections of days spent in an old pasture, of dreams under shading trees where Pan might have piped to Cynthia, of romps among woodlands that might have attracted a Corydon and an Amaryllis, and rambles after many a fern, many a luscious berry and gaily-colored flower.

It was an old pasture, old even then; for a portion of it had once been the field of an early settler, and there were the visible remains of the cellar, all grown round with lilac bushes and clumps of downy catnip. The pasture had its traditions, too; stories of the young bride who had been brought there by the sturdy pioneer, who had worked seven years—after the ancient patriarchal fashion—to win her of her stingy, Laban-like father; the first child of English parentage in town had been born in that house and a whole volume of romance lay untold of that early home and struggling life. Years had passed since the hearthstone had been warmed by a genial fire, and the bones of the settler and his wife, the fairy-like Rachel whom he had won after so many years, lay resting under the sod in the neighboring orchard, where a rude stone told the record of their lives.

There were many acres in the pasture lot, fifty at least, and it abounded with beautiful places and out-of-the-way nooks. It had knolls fragrant with sweet-fern, and hollows where strawberries ripened fine as those that grew in his Grace the Bishop of Ely's gardens at Holborn. In one place we always knew where to look for the largest checkerberries, and under the hemlocks on the banks of a purling stream there were bunches of "pudding-plums," red as the deepest coral ever fished from the Indian seas. The pasture was sterile in some places, luxuriant as a garden in others; it had several small bogs where there were bulrushes and flags, and where many and many a time, when boys, we had stood and stoned the frogs who were always jubilant there in the spring. A portion of the pasture bordered on the highway for the space of a dozen rods or more, and on the other side was the shadow of the deep wood, into which a sled-path entered, sinuous as a serpent's tail.

There was the long, green lane, with a high wall on each side, leading from the barn-yard gate. How many times we had driven the cows, speckled Beauty, brindled Loo and claret-colored Cherry, up that narrow way at night, whistling merrily under our ragged palm-leaf hats! Granite rocks bossed with gray-green lichens were scat-

tered over the sward, and there were green herbs shooting up under every hedge. Oh, that pasture lane, how fragrant are the memories it holds—of the cheerful, dewy, sunshiny mornings when I rose with the sun to follow the cows to pasture, in search of the first ripe strawberries, and of the radiant sunsets when through the gate walked slowly the three cows, the two black cossets, while Dan, the white farm-horse, and several frolicking yearlings came up less dignified and orderly.

But what the old pasture was richest in were the wild flowers which, thick as if shaken from the lap of Flora herself, sprinkled every foot of this grand old lot. Almost as luxuriant a nosegay could be gathered there any day from earliest May to golden October as Corydon names in Virgil's second Eclogue:

"Behold the nymphs bring the lilacs in full baskets; fair Nais, cropping the pale violets and heads of poppies, joins for thee the daffodil and flowers of sweet-smelling dill. Then, interweaving them with cassia and other fragrant herbs, sets off the soft hyacinths with saffron marigold. And you, O laurels, I will crop; and thee, O myrtle, next; for thus arranged you mingle sweet perfumes."

There were the early flowers; violets, blue and white; violets all along the stone walls and in the shadows of gray old boulders as sweet and as beautiful as if they had been planted in the night by some of the classic nymphs. Anywhere in the borders of the wood you could find the white flowers of the sanguinaria, and the yet more delicate blossoms of the anemone. Then came bluebells and hepaticas. Oh, those dear old-fashioned, pallid and faintly-smelling flowers! They have been loved by every generation since the children of the Pilgrims first found them blooming in the wilderness by the side of their wood cabins. There they were, peeping out on some mossy old bank in some briery corner; then we saw them brightening the soil on the steep side of the ancient orchard. As the meadows grew green out came golden cowslips, scattered well over them, and on higher ground the star-like blossoms of the royal dandelion.

We could find the arbutus in two places widely apart—on the sunny hillside under a few straggling pines and by following the winter sled-path deep within the wooded swamp. There was not a day's difference in their opening, and the white and the rosy clusters were mixed in about the same proportion in each. Who is there that plucks those delicate flow'rets without thinking of those early days at New Plymouth, of the long, cold winter, and how glad must have been the hearts of those Pilgrims when they saw the clearing free of snow and those pretty blossoms peeping up among the leaves as if to welcome them to the New World. And who does not imagine the Puritan maidens carrying home bunches of them and filling the pitchers of Delft to set in the sunny corners of their sitting-rooms? Doubtless the lovely Priscilla wore some of the beauties in her hair as she sat spinning when John Alden went to woo her for Miles Standish, and the maiden answered him, looking up with eyes that had a roguish light in their depths and her cheeks burning red, "Prithee, why not speak for thyself, John?"

Then later came trilliums, Jack-in-the-pulpits and many

other plebeian flowers. If we stayed away but a single week it was wonderful what a transformation took place. There were so many flowers, and they bloomed in such affluence, in such prodigal bounty, in such spendthrift waste. All through the summer months there was a gaudy show of pond-lilies, buttercups, golden-rod and cardinal flowers, while rhododendron and clematis could be plucked by the armful. In one spot there was a winsome and very sensitive species of oxalis; in another grew some curious green orchids, and in the swamp, creeping over the old logs and stumps and making a carpet dainty enough for Titania's own fairy feet, with its brown, thread-like vines, whole rods of snowberry, its berries looking like drops of white wax set amid the tiny ovate, glossy, aromatic leaves.

About the ruined cellar of the old settler's home, beside lilacs and the common red roses, there grew another exotic, a sweet-briar, the eglantine of the poets. What a lovely thing it was, and what a romance it might have told! We loved to think that it was brought there by the young wife of the settler from her home in the old colony, that she wore it in her hair on her bridal night, and so set

the slip out in the clearing in the wilderness. Many a time, doubtless, as she watered and nurtured it, the tears came to her eyes as she thought of the old home and the aged parents she had left; yet was she happy amid her tears, and as the little blossoms grew in the household perhaps to them she told the story of the eglantine and of the comfort it had been to her.

The pasture ended at the south and was lost in a dreary *terra incognita* of alder thickets and slumbering pools. But the intervening woods were beautiful. How cool and shaded in the burning midsummer! How fragrant the beds of fern! In the autumn months, when the blue-jays were calling among the trees and the squirrels were scampering from branch to branch and the partridge drummed among the deep recesses, it was no less delightful. And when the winter came, and the brooks and pools were ice-locked and the snow lay deep in the wood-path, what fun it was to break through the drifts behind the slow, patient oxen, and return with a sled-load of maple or birch, mounted on the load like Cræsus! Ah, the old pasture lot! what charms it holds for those who know it best!

CLINTON MONTAGUE.

CURIOUS FACTS ABOUT FLOWERS.

WHAT would we do without flowers? Just suppose that every rose, every flower, even to the daisies and buttercups that often turn our fields into a waving sea of silver or gold, were blotted out of existence! How tired we should grow of the unvarying sameness of the landscape. But our Heavenly Father, in his infinite goodness, has not only given us plants necessary for the maintenance of life, but has scattered everywhere these bright blossoms, to delight us with their beauty and fragrance. And the more we study the life and habits of the plants around us, the more shall we be led to adore the Divine Being who made not only the stars that shine overhead, but the tiniest flower that we crush under our feet.

And how interesting is the study of plant-life! Some plants *sleep*; others are *sensitive to touch*; some are night-blooming, and still more wonderful are the insect-ivorous and moving plants. Among sleeping plants we find the well-known sunflower, the creeping portulacca, with its lovely wax-like blossoms, which, as we all know, make the most brilliant display about midday, closing up soon after noon. The *Convolvulus major*, better known under its old name of "morning-glory," greets us in the early morning with its delicate bell-shaped flowers of every variety of color; but if we go out a few hours later, when the sun is high, we will find them all closed or asleep. The crocus opens in the morning, and goes to sleep about noon.

Some plants again do not awake or flower until the afternoon or evening, like the anthericum, which blooms about two o'clock, but closes before night, and the marvel of Peru, or, as it is familiarly called, "four-o'clock," which is gay with color about four o'clock and outrivals the

azalea in beauty until eight o'clock the following morning. The evening-glory, a species of ipomœa, flowers only in the evening, as does also the evening primrose, which opens with a loud noise. One of the most beautiful of this class of flowers is the night-blooming cereus, a variety of cactus—one of the most curious plants in the vegetable kingdom—which unfolds about nine o'clock, remaining open for several hours.

Another curious fact about flowers is that some are only fragrant at night, like the *Hesperis tristis* and the Lady Washington pelargonium. Then, again, some flowers undergo a change of color; the forget-me-not, for instance, is first yellow, then blue; phlox, first blue, then pink; the beautiful Chinese hydrangea is first green, then rose color; while the *Cheiranthus mutabilis* changes from yellow to orange, then to red, becoming, finally, a rich purple. The *Hibiscus variabilis* is white in the morning, pink at noon and bright red at sunset.

Of sensitive plants there are about one thousand known varieties, all included under the general name of *Mimosa*. It is a curious thing to see these plants close when touched; even when only shaken the leaves will all close and sometimes the leaf-stalk itself will sink down on the ground, rising again in the course of a few hours. The best known of these plants is the *Mimosa sensitiva*, a native of Brazil; it has prickly stems and leaf-stalks, with rose-colored flowers.

Another curiosity in plant-life is the moving plant of India, the leaves of which move upward or downward; after a leaf reaches the top of the stalk it slowly works its way back again, and it is said that they have a rotatory motion, going round the stalk. This motion of the leaves is seen in its greatest perfection during warm, moist

weather, while, singular to relate, if high winds prevail they are almost motionless.

Then there are the insectivorous or insect-eating plants. Among the most curious there is the *Nepenthes*, or East India pitcher-plant; its leaves resemble a pitcher with lid, into which insects often enter and become the

food of the plant. The Venus fly-trap, so frequently seen in our gardens, is another of these curious plants. The leaves have stiff, hair-like spines, and when any insect ventures upon it, it is a prisoner, the leaves closing firmly on it, nor do they unfold until the insect is entirely absorbed.

J. M. S. CARTER.

STRAWBERRIES.

THE time has long since passed when the strawberry was classed among luxuries. It is one of the necessities of the present, and one of the most important and valuable crops of the farm or kitchen-garden. To the progressive horticulturist we are indebted for the relative position this fruit occupies in the list of small fruits, which it heads. There is no fruit that has been so much improved by selection as the strawberry; not only as regards size, but in quality and in the length of time it can be had, with proper care, for the table.

Its importance to the household warrants us in giving a few hints on its general culture, notwithstanding the fact that every agricultural and horticultural periodical is doing precisely the same thing. In order that our readers may have the best information possible we refer them to Peter Henderson, Esq., whose experience has been as extensive and varied as that of any horticulturist in the country, and to whom the lovers of this delicious fruit are indebted for the dissemination of many of the best varieties under cultivation. He says:

"Strawberries will grow on almost any soil, but it is all-important that it be well drained, either naturally or artificially; in fact, this is true for the well-being of nearly all plants, as few do well on soils where the water does not freely pass off.

"Thorough culture requires that the soil should be first dug or ploughed, then spread over with at least three inches of thoroughly rotted stable manure, which should be dug or ploughed under so far as practicable, to mix it with the soil. If stable manure cannot be had, artificial manure, such as bone-dust, &c., should be sown on the dug or ploughed ground, thick enough to nearly cover it, then harrowed or chopped in with a fork, so that it is well mixed with the soil to at least six inches in depth. This, then, is the preliminary work before planting, to insure a crop the next season or in nine or ten months.

"The plants must be such as are layered in pots, and the sooner they are planted out after the 15th of July the better, although, if not then convenient, they will produce a crop the next season, even if planted as late as the middle of September; but the sooner they are planted the larger will be the crop. They may be set from pot layers, either in beds of four rows each, fifteen inches apart and fifteen inches between the plants, leaving two feet between the beds for pathway, or be set out in rows two feet apart, the plants in the rows fifteen inches apart; and if the plants are properly set out (care being taken to firm the soil around the plant, which is best done by pressing the soil against each plant with the foot), not

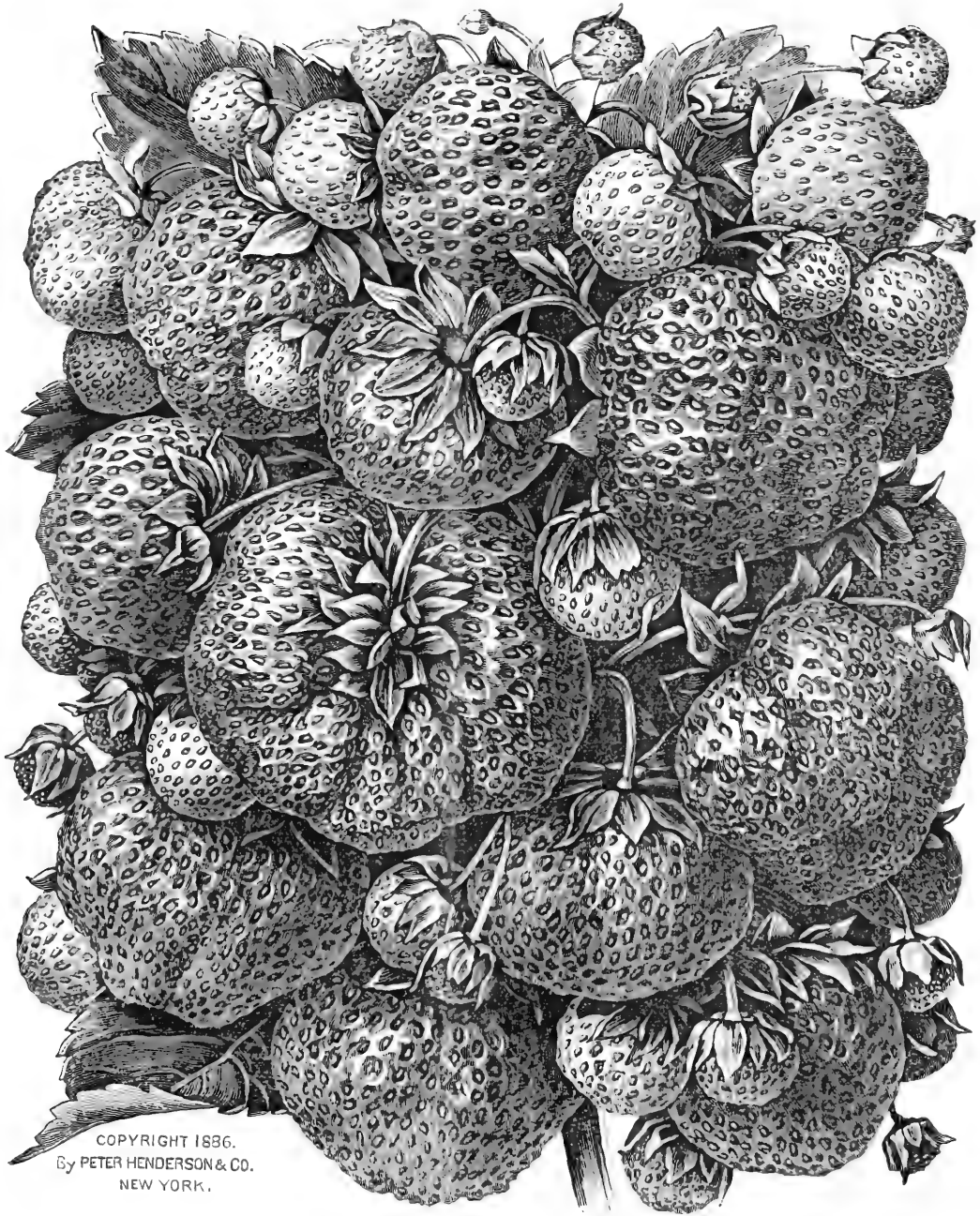
one in a thousand of strawberry plants that have been grown in pots will fail to grow.

"For the first three or four weeks after planting nothing need be done except to hoe the beds, so that all weeds are kept down. Be careful to do this once in every ten days; for if the weeds once get a start it will treble the labor of keeping the ground clean. If strawberries are grown on a large scale, by all means use a wheel hoe, such as the 'Universal,' which will save four-fifths of the labor of hoeing and do the work better. In about a month after planting they will begin to throw out runners, all of which must be pinched or cut off as they appear, so that by the end of the growing season (first of November) each plant will have formed a complete bush one foot or more in diameter, having the necessary matured 'crowns' for next June's fruit.

"By the middle of December the entire beds of strawberry plants should be covered up with salt-meadow hay (straw, leaves or anything similar will do as well) to the depth of two or three inches, entirely covering up the plants and soil, so that nothing is seen but the hay. By April the plants so protected will show indications of growth when the hay around each plant is pushed a little aside to assist it in getting through the covering, so that by May the fully developed plant shows on the clean surface of the hay. This mulching, as it is called, is indispensable to the best culture, as it protects the plants from cold in winter, keeps the fruit clean, keeps the roots cool by shading them from the hot sun in June, and at the same time saves nearly all further labor after being once put on, as few weeds can push through it.

"By this method we prefer to plant new beds every year, though, if desired, the beds once planted may be fruited for two or three years, as by the old plans; but the fruit the first season will always be the largest in size, if not greatest in number. Another advantage of this system is that, where space is limited, there is quite time enough to get a crop of potatoes, peas, beans, lettuce, radishes, or, in fact, any summer crop off the ground before planting the strawberries, thus taking two crops from the ground in one year, if desired, and there is also plenty of time to grow cabbage, cauliflower or celery after the crop of strawberries has been gathered."

Mr. Henderson considers the "Crimson Cluster" (see illustration), a variety raised by E. W. Durand, Esq., to be the coming strawberry. He says: "On the 10th of June of this year we examined this strawberry on the grounds of the originator, and found 3,000 plants that had been planted on the 15th of August, 1885, which is



THE NEW SEEDLING STRAWBERRY, CRIMSON CLUSTER.

less than ten months from the date of planting, were producing a crop that would average fully a quart to each plant. On the 10th of July the 3,000 plants yielded seventy quarts.

"When to this extraordinary production we add the further facts that this strawberry is of the richest-crimson color, is borne in immense clusters (hence the name) and that it is one of the latest as well as the earliest, as its great vigor prolongs its season of fruiting, and that it is also of excellent quality, there is every reason to think that it is the most valuable strawberry ever raised by Mr. Durand."

In strawberry culture it is not altogether a question of variety, as there are very many good ones, and some will thrive in a given soil and situation when others will not. In all cases it is policy to aim at the best, and to avail ourselves of the advantages of others' experience and skill in cultivation. If we were ready to plant now or at any time in the fall we should use pot layers. If we were to plant in the spring we should plant early and use runners, and in all cases, for the best success in size and quality of fruit, make a new bed annually. Starting now will be a year gained.

OUR GARDEN.

IT is only a tiny garden,
Where the commonest flowers blow,
Where tangled vines are straying,
And shrubs all wayward grow.
No trim or stately hedges
Border our garden path,
No rare and lovely blossoms
With strange, new names it hath.
Under the snows of winter,
The hardy germs endure,
Whose bloom the April sunbeams
From the brown earth allure.
They are the flower-friends loyal,
Returning year by year,
Never from summer sowing
Comes bloom that's quite so dear.
Yet in the sweet spring sunshine
We plant the tiny seeds,
Whose germinant life is holding
Such truth for him who heeds.
And always, whatever disaster
Our garden-plot befall,
Some fair and fragrant blossoms
Are recompense for all.
Tall lilacs bend to give us
Their clustering, purple bloom;
Syringas, snowy-petalled,
Exhale their dense perfume.

The peerless jonquils linger,
And the nodding daffodils,
Each with the golden sunlight
Its tiny chalice fills.
The lilies of the valley,
Half hid in sheltering green,
Their noiseless chimes are ringing,
The birds and bees between.
Nasturtiums, sweet peas, verbenas,
And asters and pansies bloom,
And scatter their sweet suggestions
As the mignonette perfume.
They tell of life arising
From darkness and from death;
And influence pure they symbol
In their still, fragrant breath.
They hint of generous giving
As surest, richest gain;
The blossoms that are hoarded
Are always first to wane.
And wonderful and countless,
And dear and comforting,
Are the recurring lessons
Of faith and trust they bring.
For on their glowing petals,
Scripture they seem to bear—
A sweet, unfailing witness
Unto our Father's care.

OLIVE E. DANA.

RAISING CHRYSANTHEMUMS.

A NEW JERSEY IDYL.

THE ELUSIVE CHERRY-COLORED "ARTEMISIA."

"ARTEMISIA," said Agricola, one bitter morning in December, as he stood by the window, regarding a pot of late chrysanthemums, "Artemisia, we had lovely chrysanthemums this fall. And I'm going to have better ones next year; I'm going to raise some from seed. If I can only get a cherry-colored one, or a sky-blue one, or a Tyrian-purple one, my fortune is made. And I will name it for you, Artemisia, and, just think, we shall be able to—"

"Remember the milkmaid," said practical Artemisia. "When hundreds of florists, all over the country, with acres of greenhouses and experience, are trying continually to produce flowers of those colors, it isn't probable that you, a mere amateur, with only a little patch of Jersey clay—"

"Artemisia," interrupted the other, "why are you continually damping my aspirations? I have some seeds which I raised myself—crosses between *Iolanthe* and *Gluk*, between *Gold Thread* and *Elaine*, between *Mrs.*

Rundle and *Thunberg*, between *Chang* and *Delicata* and lots of others; and *Mr. Wirestalk*, the florist, who is chrysanthemum-mad as well as myself, has given me a lot to try, and I'm going to plant them this very day."

Dismay dropped like a cloud across the face of Artemisia. "Plant seeds of those delicate things in December! and in a house warmed solely by coal stoves! and where there is only one available south window! and when there is only one room in the house, and that my bedroom, that is even warm enough to sew in, to write in, or sit in, without a shawl, after November! You never can mean it."

"But I do mean it," persisted Agricola, who, like most amiable persons, was extremely obstinate when he smelt the least whiff of opposition in the air. And he produced from the cellar three shallow boxes filled with carefully prepared earth.

"Now, Agricola," said Artemisia, her prophetic soul perceiving too plainly what was in store for her, "if you

plant those seeds they will just spoil the whole winter for me. I shall be continually watching and watering, and moving them out of draughts, and chasing the sunshine with them, and sacrificing all my brilliant geraniums for the sake of those ugly little flowerless plants—and not only so, but I shall have to take them to bed with me every cold night. You know how you raise plants; you are away all day and all the really worrying work and bother of them falls to my share. Don't plant 'em!"

"I should think you might do one little thing for me," said the aggrieved amateur, forgetting, like most of his sex, how many myriads of "little things" she had been doing for him in the last twenty years. "I'm sure you're as fond of chrysanthemums as I am."

"Yes, I am fond of them, or I never should have done so much hard work for them," replied she. "And I'm still willing to work for them, when it is necessary; but your plants will be no farther along next October than mine, which I shall plant in May. Don't plant 'em."

"There!" said unconvinced Agricola, covering up the last precious seed in the earth—"now, if you'll just take a wet brush and spray that soil, and set the boxes in a good warm place, those seeds will be up in a week or ten days. Don't look so glum, Artemisia, think of the splendid cherry-colored chrysanthemums which will be named for you!"

With a sigh from the bottom of her heart, Artemisia took charge of the boxes. "Like Pandora's," said she, "there's a grain of hope in 'em, but that's all." The kitchen, of course, was the warmest place, but it was a small three-cornered apartment, and the two windows looked north and west, and the western one was darkened by a weeping willow. In the parlor, two windows looked north and were obscured by the front porch with a screen of honeysuckle; and one window looked east, straight against a dense balsam-fir.

"Whoever built this house had a rooted antipathy to stove-plants," muttered Artemisia, as she came into the dining-room and stood by her one precious south window, her one gleam of sunshine and blossom through the dreary, drizzling winters. It was gay now with geranium flowers—scarlet, and white, and pink, and crimson. A flourishing heliotrope sweetened the air, and a beautiful begonia hung out its clusters of coral pendants, while a lovely Nile lily showed a slowly whitening bud, and a pretty blue-eyed browallia spread dozens of wide-awake flowers.

"Some of you must make room for these unsightly boxes," said Artemisia, as she exiled one geranium to the kitchen and two more to the shadowy parlor, where, though they kept alive, they always obstinately refused to bloom.

The boxes must be watched narrowly, because the surface dried so rapidly in the stove-heated room. After a week or so of waiting, she saw the small green pips appear, and then diligence must be doubled. They were too feeble to bear a drop of water, and must be moistened with fine spray, made by drawing one's hand across a wet brush—and this not once, but half a dozen times a day. Presently there came down a "cold snap," and Artemisia dared not leave the little plants downstairs over-

night, because, though the dining-room fire never went out, still, the house, having been built "on a contract" (Artemisia said she supposed that was what made the wood-work contract so, and leave such enormous cracks) was very airy in cold weather, and the loose window-casings were apt to prove treacherous to tender plants left near them. So Artemisia took the baby plants to bed with her, as she had said, and then worried half the night for fear they would damp off, or dry up, or in some way wither and cease.

At first there were about a hundred of the plants. But some of them "damped off" in that irrational manner so familiar to florists; some of them appeared to be cut off just below the surface of the soil by an invisible insect or grub, which never explained itself, and some of them seemed to give up the ghost of their own free will, without just cause. Every Sunday Agricola would take a look at them.

"Two more defunct, Artemisia," he would remark, reproachfully; "don't you water 'em too often? or perhaps keep 'em too dry? If I have fifty per cent. of 'em to bed out in the spring I shall be lucky." And Artemisia sighed and tugged the boxes upstairs again, walking up the front breadth of her skirts at every step, as is the fate of women who climb stairs with both hands full. In a day or two, if the sun shone, it occurred to her that the solar rays and the heat from the register together perhaps made it too warm for the young plants up there, and so she took them down again. "Alas!" said Artemisia, parodying the words of one of her favorite hymns,

"What various hindrances we meet
In raising plants by coal-stove heat!"

The accident imp lay continually in wait for the seedlings. One day the heavy curtain at the dining-room window was heedlessly dragged across the end of a box, and off went half a dozen brittle stems; then somebody, and it wasn't Artemisia, laid the "Life and Letters of Jane Welsh Carlyle" on one of the boxes, and the melancholy burden killed several more; and one day Artemisia's canary birds, out of their cage for an airing, mistook the young plants for salad and devoured several others, without waiting for oil or vinegar.

So the winter worried along, and by-and-by, after everybody was tired to death of drizzle and lead-colored skies and frozen bare ground (for there were only a few little flurries of snow that winter, and even Artemisia's hardy lilies and rose-bushes winter-killed as they never do in Maine), spring approached, in a gingerly and unwilling fashion, advancing one step and going back two, like the arithmetical frog in the well. And after a great deal of this Marching and counter Marching, which extended across April and into May, it was time to make the garden.

Now, the State of New Jersey is composed largely of red clay; and for many years the inhabitants thereof have been mostly engaged in molding up and baking their State into tobacco-pipes, drain-tiles and an inferior grade of flower-pots and selling it to outsiders in these shapes. Probably no other State in the Union is so widely disseminated among the other States as is New Jersey. Smokers,

from northern Maine to the Gulf, draw the divine aroma of the poisonous weed through a piece of the State of New Jersey. The question suggests itself, what will become of the Jerseymen after they have baked and sold the last lump of their native soil? Does not even Nature herself abhor a vacuum? And will there not then be lots of men without a country?

The acre upon which Agricola had pitched his tent had for its surface soil, red clay; the sub-soil was red clay, and the sub-subsoil was red clay and stones, and the very bowels of the earth appeared to consist of the same materials. The native growths appeared to be coarse, rough grasses, cockles, bur-marigolds, beggars'-ticks and poison ivy, enlivened in their season by wild carrots and ox-eye daisies. It was not a garden, but simply space for a garden; and on this unpromising groundwork did the two enthusiastic amateurs attempt to superimpose arable material sufficient for a flower-garden in general, and chrysanthemums in particular. Two horses and two men with a plough and a harrow, sundry other men with spades, forks, shovels, hoes, rakes, trowels and all manner of digging and pulverizing implements, were called into requisition in the attempt to "meller" the hard-hearted soil. Leaf-mould from the woods, stable manure bought with gold from neighbors who cheated scandalously in both quality and quantity, ashes, brook-sand, guano, bone-dust, soot, sulphate of ammonia and various sorts of florists' fertilizers, put up in bags like confectionery, and costing about as much—all these and more did Agricola purchase with money and pour into the ungrateful bosom of his garden, which, like the insatiable daughter of the horse-leech, continually yawned and yearned for more.

Then came the bedding-out. Not only the seedlings, which Artemisia turned out of doors with a sigh of real relief, but dozens and dozens of plants from England, from France, from Germany and from Long Island—all the newest kinds, the latest novelties, Chinese, Japanese, anemone, incurved, reflexed, pompon; by mail, by hand, by express, by steamer, by dozens they came, until arranged in ranks over three hundred precious plants, each with its lordly name carefully written on a white pine label and stuck in the ground beside it, stood waiting for the bugs and the whirlwind.

And not in vain. The bugs came first—in June. Artemisia had frequently remarked, with bitterness, that nothing but buildings could be raised on red clay; but she presently found it especially adapted to the raising of June-bugs—great, blundering, booming, bumbling, bouncing beetles, which bored their way out of the ground at night, leaving the surface so full of round holes that it looked like a Creedmoor target. Though these pests were active only at night they were crazily attracted toward a light. Artemisia often used to brush a pint of them off the outside of the window-sill, where they fell, helplessly sprawling on their backs in the vain attempt to get through the glass to the kerosene lamp inside. They were not specially fond of chrysanthemums, but ate ravenously maple-leaves, rose-leaves and buds and blooms, apple-tree leaves, cherry-tree, peach-tree and quince-bush leaves, sweet-briar shoots, and everything that was pret-

tiest and most valuable in the garden. The weeping-willow at the western end of the house was populous with them as soon as the sun set, and the evergreens were so full of them that in the still evenings they made a noise like the distant voice of the sea. The maples, which grew all along the street fence, were favorite champing-grounds of the destructive creatures, and in the mornings wide circles beneath the trees were carpeted with gnawed fragments of young leaves. The two devoted floriculturists, armed with two old tomato-cans and a lantern, used every evening to go out in the garden, visit every rose-bush and fruit-tree and gather the beetles by handfuls; for though the insects were rapid and vigorous flyers they were very slow to take wing, and could be gathered as rapidly as cranberries.

After the cans were filled, what was to be done with them? Cold water did not even wet their polished armor; hot water would not kill them; soda, oxalic acid, vinegar, acetic acid and kerosene, alike failed to make any impression on them. They could only be prevailed upon to die by actual cremation. "And I don't doubt," hazarded Artemisia, "that even their ashes will rise in new beetles next year."

Then there were green worms, turned up with yellow and picked out with black—the creatures which eat tomato-vines in the North and tobacco in the South. These took an occasional lunch off the chrysanthemums, but to stomachs attuned to tobacco the mild astringent bitter of Agricola's favorites was but an insipid flavor, and so they escaped destruction. Then came the thunderstorms and the sudden irrational winds for which the locality is famous, and after every shower Artemisia went out to find more or less of her plants prostrate in the mud, supporting-sticks, neat labels and all, "in one red burial blent." All these must be righted, and the red mud washed off, the bruised leaves cut off and everything put in order for the next flurry. Then, in their season, came caterpillars of assorted colors and sizes; and green aphides and black aphides; and all these went, in their season, too, excepting the black aphides. They stayed. In spite of white hellebore, and yellow snuff, and black pepper, and red pepper, and dust, and ashes, and muttered profanity from Agricola, they stayed.

So did the neighbor's hens. Mrs. Feeble, who lived next door (half of Agricola's acre divided him from the Feebles), was rich in the undesirable wealth of hens and boys—all alike bold and bad and breachy, and altogether unwelcome visitors in a flower-garden. The boys meddled with whatever they saw after climbing the party fence, and stole whatever they wanted, until plain-spoken Artemisia, who always liked to be understood, distinctly told them (in the hearing of their mother, who was peering through the venetians, and thought herself invisible) that the picket fence was not an accidental production of the soil, but was put there on purpose to keep people out. "The next time your mother sends you over here on an errand," said she, knowing perfectly well that the boys went and came as they chose, without let or hindrance from their mother, "come in at the gate and go out the same way. And don't climb this fence again this summer." And though they still stole

the fruit and the squashes, they did not invade by daylight and make a play-ground of the flower-beds.

But the hens were incorrigible. The Feebles had no garden—nothing but “stubborn glebe” was in their enclosure—and the hens were wild to scratch in friable soil. They were particularly fond of places where seeds had just been planted or young plants newly set, and they dug out and ate seeds and plants alike, without caring that some of the latter had cost five shillings apiece in London and a hundred times that amount in work and worry. Even after the plants were strong and well-grown, the hens would excavate and burrow at their roots until the foliage withered in the sunshine, and when Artemisia, with much “shooing,” went to drive them out, at the expense of dragged skirts and dew-wet feet, she would find some of the precious plants flat on the ground quite undermined, and perhaps with the best shoots broken short off.

“When I finally take leave of all honesty, self-respect, and decent regard for the rights of others,” said Artemisia, after a day of unusual hen-worry, “I know a way in which I can get an easy living, without work, trouble or risk, and still keep my standing in the church and my footing in respectable society.”

“Those things don’t seem compatible,” remarked Agricola, picking the superfluous buds from a flourishing Père Delaux; “how will you manage it?”

“I’ll keep hens,” said Artemisia, grimly—“feed and fatten them entirely on my neighbors, in spite of complaint, remonstrance and entreaty, sell eggs at the highest New York price to the people who support my hens, eat all the chickens I want, and sell the others (when it is too late for them to do any more mischief) in Washington Market for ‘broilers.’”

Only a few days previous, under cover of handing Mrs. Feeble a dish of luscious Louise pears over the party fence, she had said to that lady, in her pleasantest manner:

“Mrs. Feeble, I think you cannot be aware how very troublesome your hens are in my garden. They eat every tomato as soon as it shows the red. I have been obliged to purchase tomatoes all summer, although my vines have produced plenty of them. But these chrysanthemums are of more value than many tomatoes. A great part of them were imported at considerable expense, and they have cost still more in labor and care. I cannot bear to see them destroyed so by the hens.”

“Oh, drive them home, drive them home,” said Mrs. Feeble, as though disposing easily of the whole matter, while she took a comfortable bite from a pear, “I’m never offended when people drive my hens home.”

“Excuse me, Mrs. Feeble,” said Artemisia, with some dignity, “but I really have something else to do besides driving home your hens. And my feet are wet through now, with following them through the deep grass. I must seriously insist that you keep them at home.”

“I wish you’d tell me how to do it,” replied their owner. “I really can’t stay out-doors and watch them.”

“And yet you advise me to do it,” said Artemisia. “As for telling you how to keep them at home, I never attempt to teach people their own business, but I should

think cutting their heads off would be as sure a way as any. It makes no odds to me how they are kept out; but I cannot have them in my garden. I keep neither hens, dog, cat, nor any other thing, to annoy my neighbors; but my garden is made a stamping-ground for three different flocks of hens, five cats and four dogs, all belonging to my nearest neighbors. It doesn’t seem to me to be quite fair.”

“Well, it *is* trying,” said Mrs. Feeble, finishing her second pear, “and I’ll tell you what I’m going to do. I shall kill all my chickens in November (“Alas,” groaned Artemisia inwardly, “after the garden is frozen!”) and then I shall send you a nice fat broiler!”

“I beg you will *not*,” said Artemisia, now quite roused; “if I preferred broilers to chrysanthemums there are plenty in the market, and I have the same right to keep hens as my neighbors. Besides, I am not a South Sea Islander; I never eat my personal enemies. A hen which has cost me work, loss and irritation all summer, I am sure would not set at all well on my stomach.”

“Hens *are* a bother,” said Mrs. Feeble, meditatively contemplating a third pear. “I remember when I was a girl at home how they used to worry mother. Why, one year they scratched up a dozen hills of early peas! Think of that now! Luckily, you haven’t any peas or corn for them to destroy!”

Artemisia turned toward her own door without another word, pursued by the strident voice of Mrs. Feeble: “I shall send you the broiler!”

“What’s the use,” said she to Agricola that evening, “what *is* the use to talk with a person who thinks that a dozen hills of early peas, which can be got anywhere and planted in five minutes, are of more value than all your costly plants? If you should bray Mrs. Feeble in a mortar, yet would not her foolishness depart from her.”

“What are you going to do with the broiler?” asked Agricola, laughing.

“Bury it under the Delaware grape-vine,” answered Artemisia, with decision.

“Do you want my advice?” asked the other. “If so, it is just this, my friend: Wait till you get it!”

The summer had opened promisingly enough, but presently it forgot to rain, and a weary drought ensued. There is always a drought in Jersey at one end or the other of the fitful and violent summer. And pretty soon the chrysanthemums, being fond of coolness and moisture, began to demand water, and Agricola pumped and carried water, and Artemisia pumped and carried more water, and they both sprinkled and ladled and dipped and showered it on the chrysanthemums till the perspiration trickled down their faces, while the blazing sun poured down upon them, and their arms ached and their shoulders ached and their heads ached and the bloodthirsty Jersey mosquito bit them until they were driven nearly wild.

Then Agricola, who was famous for bright thoughts, suddenly thought of a force-pump. “The very thing!” said he. “With a hundred feet of hose I can reach nearly every chrysanthemum in the garden, and we can throw as much water in half an hour as we can now in half a day!”

"But it unfortunately happens," said Artemisia, "that when the weather is particularly dry the water in the well is particularly low."

"Don't prophesy evil," said Agricola, all agog with his new project. So within a few days an expensive force-pump was purchased, and a man enticed from the village to set it. "It will be just fun to water the plants with this," said the proud proprietor, as he proceeded to attach the hose-pipe and put on the nozzle.

But Artemisia presently discovered that it was something more than "just fun." If she held the nozzle it muddled her dress and wet her feet, and covered her with spatters of liquid red clay; if she left it in disgust and took a turn at the pump, it pulled her arms out of their shoulder-sockets and made her heart beat so that it choked her. In either case both her hands were fettered and so the mosquitoes made her extremity their opportunity, and stung her arms, hands, shoulders, face, neck and feet until she felt on fire. And just as she was about to protest that she really could not endure it a minute longer, lo, the faithless well was dry! Exhausted, pumped out, used up, done for. And Artemisia exclaimed, "What ill-luck will happen next?"

So the force-pump investment was, on the whole, a failure, since whenever there was plenty of water in the well the ground was wet enough; and whenever the ground was dry there was a scarcity of water in the well. "What an odd coincidence!" said Agricola, "and how odd that it never occurred to me before! It seems like

(To be continued.)

A STORY OF ROSES.

"Of all flowers,
Methinks a rose is best."

—BEAUMONT AND FLETCHER.

JESSIE HOWLAND was in the flower-garden, gathering a bouquet. She picked a few carnations, smelled of the heliotrope, and was just admiring a beautiful rose, when, conscious that someone was near, she looked up and saw a boy just outside the fence, gazing at her and the flowers with unfeigned delight. She was not quite old enough to think the admiring looks were for her, but supposed they were all for the flowers she so dearly loved; so she pulled off a rose from the bush, which she held in her hand and offered it to the boy. He eagerly thanked her and hurried away. Jessie watched for him often after this, but he did not come again, and the occurrence gradually faded from her mind.

Mr. Howland's family lived in a small country place, quite a number of miles from the city where Mr. Howland was engaged in business, and where he went every morning and returned on a train in the evening. They much preferred living in this way, as they could have the advantage of both city and country. Mr. Howland was very fond of flowers, and had many rare and beautiful plants in the large flower-garden at the side of the house, and as it fronted the street it was greatly admired by all passers-by. The grass in the large yard in front of the

fate!" "It *is* fate," said practical Artemisia, remembering her warning.

By-and-by, in the fall, the drought broke up—and so, nearly, did the chrysanthemums—in the three-days' stress of wind and rain which attended the first equinoctial. There are generally three or four equinoctials every autumn in Jersey. Those of the chrysanthemums which were not tied up to rods were flattened in the mud again, and many of those which *were* tied up were cut off by the string. Several of the most promising were snapped off close to the ground, and that without remedy. It was noticeable that from the beginning, whenever a plant was killed, either by accident, drought, drowning, hens, dogs or wind, Agricola smote his breast and exclaimed, "I'll wager that's the cherry-colored one!" And Artemisia smiled sadly and said, "I'm pretty sure it is the sky-blue one!"

It was possible, by forcing and coaxing, to make some of the plants show flower-buds in July and August; but if they bloomed in hot weather they were sure to scorch and curl and become flat failures. "Of course they can do it in England," said Artemisia; "they never have any sunshine there. But in this country, or at least in Jersey, early chrysanthemums in the open air are just impossible."

"They are the most self-willed flowers in the world," said Agricola. "They will not bloom properly until cold weather, and yet they resent the first sharp frost. There isn't a minute's peace with them after the cold nights begin." "Nor before, either," said she.

house was kept very clean and so closely cut that it looked like velvet. There were many large old trees, which gave delightful shade in the hot summer months, and a pretty little summer-house covered with clematis, which bore a profusion of purple flowers. There was also a fountain whose waters flashed in the sunlight, glowed with many colors and fell sparkling into the marble basin below. The house, which was some distance from the street, was large and commodious. It had bay windows and long, vine-covered piazzas, where one might sit and view the beauty around. It was altogether a most delightful summer retreat, as many of their friends agreed who came to visit them at this time. Jessie was the only child and had her father's love for flowers; she spent a great deal of her time among them, and daily grew more beautiful under their sweet influence.

But we must go back and discover the whereabouts of the boy who had been so pleased with Jessie's proffered flower. Harry Wilton was the only son of a widowed mother, and his ambition was to become large enough to earn their living. He had always attended school, and his mother had to exert every effort for their support. They lived in the great city, where prices were high and labor cheap. But they had always managed to get along, and their small rooms were models of neatness, if not of comfort. The morning that Harry passed

Mr. Howland's was Saturday, a holiday in the schools, and as one of his friends was coming into the country he rode with him, and while the man was finishing his business Harry walked on until he reached this place where the flowers had attracted his attention, as he also had a taste in that direction. How often he had wished that he might have a plant of his very own to put in the sunny south window in their little sitting-room at home. But all their money had to be spent for necessities, so he had never been able to gratify his desire. But when Jessie gave him the rose he noticed that it had a long stem with a small branch, which he thought might grow. If it only would he might have a plant after all. So he hurried away, anxious to reach home. The man was waiting and though the way home seemed long to Harry, he soon reached there and was so excited over his new treasure that he could hardly stop to explain all to his mother as he begged for something to put it in, and never was a boy happier than Harry as he proceeded to fill a small jar with earth in which he carefully put his slip, which seemed suited with its new quarters, as it soon rooted and one day surprised its owner with a small leaf at the top; others followed, and after this it grew rapidly and fully repaid the care bestowed upon it, until finally there was a bud discovered, which expanded into a beautiful cream-colored rose. Harry's joy knew no bounds as he rushed out for Jim, a man who sold plants on the street, and whose acquaintance he had made through the medium of the flowers which he had so often admired.

Jim had often wished he might give him one of his plants, but they were not his and he was obliged to use all his money for his own family. When Harry found him he had just reached home, and so came and admired the rose enough to satisfy its owner. As Jim went home that night he had a plan in his mind for Harry's welfare. He thought it over and over, as he was a man of few original ideas, and finally resolved that he would venture. So, when he went to his work the next morning, he told his employer at the greenhouse about the new rose, and then, gaining courage, told about Harry's love for flowers and how he had always wished that he might sell plants as Jim did, and Mr. Brown, the owner of the greenhouse, seemed quite interested, and said he would go that night with Jim and see the wonderful plant. So they both went, and Mr. Brown was as enthusiastic as could be wished. He inquired where it was found; but Harry would tell no one that but his mother, as he could not talk of the beautiful, fairy-like creature who gave it to him. He then wished to buy it, but that was not to be thought of at any price. As he talked with Harry he was pleased with his honest, frank ways, and decided that he was the boy he needed to work in his greenhouse. So it was settled that he should go. The wages were small, but they seemed very large to Harry. And then to think of working among the flowers! That was best of all. He was to attend school part of the day and the rest of the time he worked in the greenhouse, slowly but steadily rising year after year, until he became a partner in the largest greenhouse in the city, the name of the firm being Brown & Wilton. Now he could support his mother in ease and luxury, and they had a nice home

of their own in a pleasant part of the city. Meanwhile Jessie had been away to school, graduated with high honors, and become a beautiful and accomplished young lady. She was to spend the winter with one of her friends in the city. It is needless to say that she was the belle of the season and received much attention. One day there was a bouquet sent to her, but as this was a usual occurrence she thought nothing of it but went on with her preparations for the evening. When these were finished she went to look at the flowers.

"My favorite roses!" she exclaimed. "Where could they have come from? I never saw any except on the bush at home, which father felt so badly over when it died and which he has never been able to replace."

There was no message left with them, and Jessie thought over her various acquaintances, vainly endeavoring to find which one sent them. However, she could not forbear wearing a cluster of the beautiful buds, which seemed like an old friend of her childhood. Once that evening, as she was talking with Mr. Wilton, who was one of her admirers, she noted a flash of triumph in his eyes as he looked at the buds, and she thought: "I will find out if he sent them." So the next day she sent a servant to the greenhouse, with orders to purchase some of the buds, but there were none to be found. She then dismissed the subject from her mind, and gave herself up entirely to the enjoyment of her visit, the time being fully occupied until the last evening of her stay, when her friend gave a large party in her honor, and she was surprised with another bouquet of the rose-buds. She could wear them just once more; and they seemed to belong to herself, for when at home she had watched over and tended her plant with so much care.

That evening, when she found herself alone in the conservatory with Mr. Wilton, and they were discussing flowers with much enthusiasm, he said:

"You wear some rare buds to-night."

Then she told him about her favorite rose-bush; how it had been brought from a foreign land to her father by a dear friend of his, who had since died, and of his efforts to find another like it, and, as she said that he would give almost anything to replace it, Mr. Wilton quietly replied, "I have one, and your father may have it on one condition." So he told her the history of the plant to which he owed his success in life; how he had been offered large sums for it, but had always kept it in his possession, hoping that sometime he might meet again the bright-eyed girl who gave it to him.

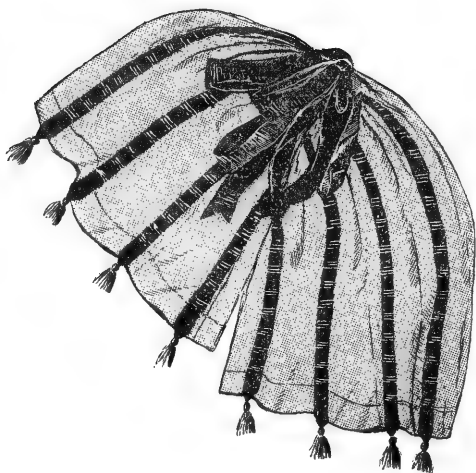
As Jessie listened, the memory of it all flashed through her mind, and she said: "So you were that little boy to whom I gave the rose?"

And he replied: "Yes. I knew you the first evening that we met, but I wished to wait and see if I could win the love of one who has been my ideal for years before I revealed my identity. And now, with your permission, I shall soon visit your father and restore his long-lost rose-bush. But I shall ask for a great reward. May I go?"

And what could Jessie say but yes, when she knew how long her father had wished for his roses?

EVELYN.

HOME DECORATIONS.



GRENADINE AND RIBBON TIDY.

Tidy.

A PRETTY and an effective result is often had when the least work is expended, and this is shown in the tidy design given in our illustration. Its beauty depends principally on the combination of colors. It is made of cream-colored cotton grenadine; half a yard will be sufficient, as the width will answer for the length; it can be bought for twenty-six or twenty-eight cents a yard. It should be a yard long after it is hemmed, and the hem should be an inch deep on the bottom and sides. The threads are drawn out in four spaces an inch and a half wide and equal distances apart. Light green, pink, blue and yellow satin ribbons are then run in and the end of each ribbon is finished in a point, to which a little tassel made of a contrasting color is attached. The tidy is caught together in the middle with a bow of many loops and ends of the four shades of ribbon.

E. S. WELCH.

My Hassock.

AN old-fashioned traveling-bag, made of a handsome piece of Wilton carpet, furnished the material, which was nearly in one piece, as its ancient shape required seams only on the ends, and when loosened from the frame the strip measured about three-quarters of a yard in length. I cut from paper a circle twelve inches in diameter, with six rather deep scallops in the edge. Using this for my pattern, I cut a similar-shaped piece from the carpet and sewed around the edge a cord covered with dark leather. Two half circles, measuring three inches on the straight side, were also cut from the carpet, similarly corded on the rounded side, lined with enameled cloth and sewed on opposite scallops of this circular piece. These were for the handles or "ears" of the hassock. A straight piece of the carpet, six inches in width, was

used for the sides and sewed firmly to the corded top, care being taken while sewing to keep the straight piece rather scant, to prevent flaring sides, and so spoil the shape. In order to have the bottom of the hassock stiff and secure, I had a thin board sawed out like my paper pattern, but half an inch smaller in size, being careful to follow the scallops accurately. I filled the carpet top as full as I possibly could with hay cut very fine, crowded this board in over it, the scallops corresponding with those in the carpet top, and tacked the lower edge of the side piece securely to the edge of the board. A covering of enameled cloth finished the bottom neatly.

S. A. WRAY.

Wall-Pocket for Duster.

A JAPANESE fan forms a novel wall-pocket. Take the rivet from the handle, so the sticks can separate, and fasten together the opposite side of the fan, as this forms the lower part of the pocket. Weave bright ribbons through the sticks to within an inch of the ends and fasten in the hole at the end of each stick a little tassel made of bright-hued crewels.

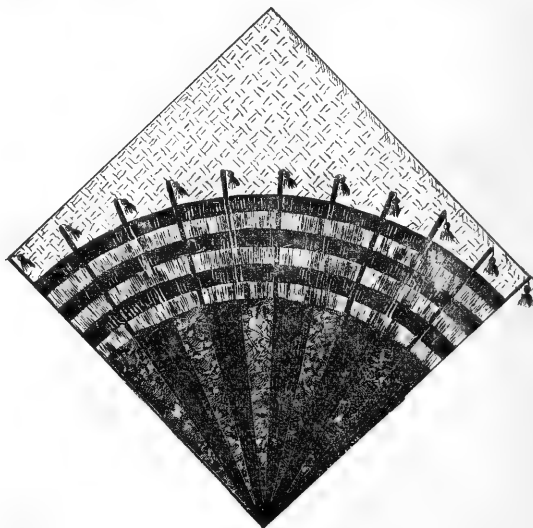
The fan thus arranged is tacked on a square board covered with any material preferred; that which comes around tea boxes is very suitable, and should be drawn over the edges of the board and neatly tacked to the back. Rings should be screwed to three corners of the board to fasten it to the wall.

E. S. W.

Sofa Pillow.

THE sofa pillow which furnished this design required very little work, and is one of the handsomest I have ever seen.

The covering for it is made of terra-cotta plush of a



FAN WALL-POCKET.

very good quality. The design is worked with terra-cotta shaded filoselle in long stem-stitch, much longer than for fine work. Five strands of the silk are used at a time, as less would sink out of sight in the plush; silk shaded in the skein is used, and the shading is allowed to come where it will. The border is outlined with tinsel, which is laid in, a short space at a time, and caught down with fine silk. If this design cannot be obtained, any other suitable one can be carried out in the same manner. Fancy India silk is used for the other side of the cushion. The edge is finished with a heavy cord in which a little tinsel shows, and large plush pompons are sewed on the corners.

E. S. WELCH.

They are necessarily rather large in size, as the rope is as heavy as an ordinary clothes-line. Standards are covered by closely winding them with the rope, and on them are placed bowl-shaped baskets, measuring eighteen inches in diameter, made of coils of the rope woven with the willow, which seems to serve only as a framework, as it scarcely shows on the outside. In some cases these baskets are bronzed around the top; in others the rope appears to be simply coated with shellac.

Very dainty fans to correspond with evening costumes are made by removing all but the rim and handle from a very small Japanese fan. Cover the frame thus left



DESIGN FOR SOFA PILLOW.

Decorative Notes.

A VERY attractive lounge cushion can be made of odd bits of single zephyr. If the worsteds are of many bright colors, so much the better; if not, it would be advisable to get a few shades of red, blue, orange and green to mix with what you already have. Then, commencing with any color you choose, crochet a chain the desired length of the cushion, and work back and forth on this in star-stitch, making only a few stars of one shade of color and interspersing the bright colors to suit the fancy. When completed the effect is something like mosaic. Full directions for working the star-stitch are given in the FLORAL CABINET for February of the present year.

Among the few novelties shown during this season at the decorative stores are the baskets made of hemp rope.

with bolting-cloth and bind the edge with narrow ribbon the color of your costume. Paint on one side a cluster of violets, sweet peas, or any delicate design. The effect is very beautiful on the thin materials. Tie a bow of ribbon around the handle.

A blotting-pad is even more convenient than the various styles of writing-tablets, and is very easily made. A heavy piece of pasteboard, twelve inches long and nine inches wide, is used for a stiff back to the pad. Over this two or three pieces of white blotting-paper are laid when cut exactly the same size as the pasteboard. To hold them together and protect the corners four caps are made by cutting once into diagonally two four-inch squares of thin pasteboard and covering them neatly on both sides with navy blue or black satin, extending the satin over the two straight sides of each piece fully three-quarters of

an inch, so as to glue these edges firmly to the pasteboard back. Line the back of the pad smoothly with satin and paint on each cap a little sprig of flowers.

These ornamental caps, by being snugly fastened over the corners, serve to keep in place the blotters, which, as they are not fastened, can be replaced by fresh ones as often as they become soiled, and when you wish to write, your sheet of paper is held in place by slipping its corners beneath the caps.

Cases, for carrying comb and brush, tooth-brush, sponge, &c., when traveling, are made of a strip of aida canvas, nine inches wide and eighteen inches long. Heavy gray linen will also answer. On this strip are arranged pockets made of gossamer rubber cloth; that which has checked gingham for its foundation is most suitable; the rubber side is used for the inside of the pockets, and

as only the checked side shows when the pockets are closed it makes a much more appropriate lining to the case. The rubber cloth can be purchased for sixty cents a yard at most stores where rubber garments are sold, and, as it is wide, one-quarter of a yard will furnish enough material. The case should be bound around the sides and the pockets with a fine quality of narrow worsted braid.

Those who are troubled with sleeplessness and nervous affections will appreciate a hop pillow, as its odor is very soothing and of much medicinal value. The pillow can be made of any size convenient to rest the head and should have an outer cover of gray linen. Any appropriate design can be stamped on this and worked in stem-stitch with filo floss, which stands washing well.

CYNTHIA.

HOUSEKEEPING.

Bread Made with Compressed Yeast.

For four good-sized loaves one quart of boiled water will be required, three good-sized potatoes (nearly twice as large as an egg) and about five pounds of flour. A large earthen bowl is best to make it in, as it retains the heat better than anything else. The flour should be sifted and warmed to insure its being dry and to keep the bread at the right temperature. Pare the potatoes and boil them. If they are new, the water they are boiled in will do for the bread. When they are done pour off the water in a quart measure, and set the potatoes on the stove to dry. With one pint of the water scald in the bowl two heaping tablespoonfuls of flour; rub out the lumps with a wooden spoon, using only a little water at first and gradually adding the remainder. Mash the potatoes, moisten them with some of the water left in the quart measure, beat them thoroughly and add the rest of the water and turn them into the bowl with the scalded flour. The potatoes and flour keep the bread moist, and, if it is properly made and taken care of, it will be as moist at the end of three or four days as anyone should desire. Dissolve one-third of a cake of compressed yeast in a spoonful of tepid water, and when the mixture in the bowl has cooled so it only feels warm to the finger, add the yeast, one tablespoonful of sugar and a teaspoonful of salt. Then set the bowl over a wooden pail, with a little quite warm water in it, and proceed to mix in the flour. Put it in in handfuls and stir with the spoon till it is so stiff that you can stir no more; then double up your fists and knead in as much more as is required. Do not put in the ends of your fingers and imagine you are kneading, but close your hands tightly, with the thumb inside, and do not open them except when you add more flour. This must be done slowly, especially at the last, and this quantity of bread should be kneaded thirty minutes. It is sufficiently stiff when it will not stick to the hands or bowl so as to require flour to loosen it.

When it is finished see that the water in the pail is warm enough so that the bowl feels warm all the time, but never hot. Keep it out of a draught, and let it stand till it feels very soft and light and has risen to more than twice its original size. Then knead it down again, using only flour enough to dry the hands. Fifteen minutes will be sufficient for this kneading, then let it get light again, keeping it at the same temperature. It will soon come up, and after it has risen the second time it must be taken out on the molding-board and molded first in a mass and then in loaves. Keep the loaves in a warm place, cover them first with a bread-cloth of linen and then a heavy flannel one prepared for this purpose, and these covers should be used each time the bread rises. When it is twice the size of the loaves as they first went in the tins it is ready to bake, and it will require about forty minutes in a good oven.

Moonshine.

This delicate and dainty dessert is very easily and quickly prepared and is quite inexpensive compared with most recipes for fancy desserts. Beat the whites of six fresh eggs to a stiff froth with a Dover egg-beater, then slowly add six teaspoonfuls of powdered sugar and beat a half-hour. Have ready one heaping tablespoonful of preserved peaches cut in very small pieces; a glass of jelly or bananas may be used instead. When the eggs and sugar have been beaten the required time, stir in the fruit. Sweeten some rich cream, flavor with vanilla and when the dessert is served pour first some cream in the saucer and then place on that a generous spoonful of the moonshine. If not convenient to use cream, make a delicate soft custard with the yolks of eggs, being careful not to make it thicker than rich cream. Let it get very cold and serve the same as with cream. If cream is used and you wonder what you can do with the yolks, make them into a custard pie, using one and a half pints of milk.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

Mr. James Y. Murkland, of the firm of Young & Elliott, of this city, and secretary of the New York Horticultural Society, also secretary of the American Seed Trade Association, died at his residence in Hackensack, N. J., on July 16. We hope to give in our next issue some account of his life.

* * *

Sweet Peas.—There seems to be a renewed interest in this good old flower, which we are delighted to see, and, fortunately, it has shown itself this season, because now we can see what a sweet pea is when properly grown, as it only can be in cool, wet weather, unless watering on a liberal scale is resorted to. The late Mr. Murkland, secretary of the New York Horticultural Society, had in his garden a row fully six feet high, completely covered with flowers remarkable for their delicate tints as well as for size. These flowers sell readily in the market at remunerative prices, and are selected by ladies of good taste for corsage bouquets in preference to any other flowers. If fashion must dictate the flowers worn we are glad to see such worthy objects chosen.

* * *

Society of American Florists.—The second annual meeting of this society will be held at Philadelphia, August 18 to 20, inclusive. The following interesting papers will be read before the meeting:

"What the Craft has been Doing the Past Forty Years." Peter Henderson, Jersey City.

"Treatment of Tea Roses during the Summer," with list of best bedding varieties. Antoine Wintzer, West Grove, Pa.

"H. P. Roses for Out-Door Summer Bloom," with list of best varieties. John Henderson, Flushing, L. I.

"Pot-Grown Roses for Market Purposes, their Care and Treatment." Robert Craig, Philadelphia.

"Fungoid Diseases of the Rose." H. J. Sackersdorff, Bayside, N. Y.

"Model Greenhouses and How to Build Them." John N. May, Summit, N. J.

Report of Hail Committee and discussion of the subject.

"The Advantages of Hot Water over Steam for Heating Purposes." J. D. Carmody, Evansville, Ind.

"The Advantages of Steam over Hot Water for Heating Purposes." J. H. Taylor, Bayside, N. Y.

"How to Build a Flue." William Hamilton, Allegheny, Pa.

"Pot-Grown Decorative Foliage Plants for General Purposes." James Taplin, Maywood, N. J.

"Carnations and their Treatment." Joseph Tailby, Wellesley, Mass.

"The Making-Up of Floral Designs in the Most Effective Manner, and Suggestions for Developing the Best Taste." A. Le Moul, New York city. (Mr. Le Moul will illustrate his paper with actual work on the stage, with fresh flowers supplied by the Philadelphia florists.)

Exhibits of greenhouse appliances, such as boilers, ventilating apparatus, hose, pots, building materials, &c., are solicited; also florists' requisites and articles employed in the arrangement of cut-flowers are desired.

Among the attractions announced will be a show of water-lilies and other choice aquatics, including a new *Victoria Regia* and several new varieties of the lotus from Japan, by E. D. Sturtevant, Esq., Bordentown, N. J., and a banquet at Bryn Mawr, on Friday, the 20th, given by G. W. Childs, Esq., of the Philadelphia *Public Ledger*, for 1,000 guests. In addition to this the florists of Philadelphia have an enormous fund with which they propose to entertain their visiting friends on a scale never before attempted in this country. We hope to attend the convention, if for no other reason than to meet our genial friend Hendrick, of Albany, as all can learn from him the influence flowers exert in the building up of character.

* * *

Hardy Flowers for Cutting.—How many of the beautiful old-fashioned flowers that have during the past few years been again brought to the front, and in many cases greatly improved, are well adapted for supplying material for the flower-basket! It would be impossible to even name the host of good things, but a few are so conspicuous at the present time as to merit special mention. First on the list are the irises, with their flag-like foliage and gorgeous flowers that rival the orchids of the tropics; then there are pyrethrums, single and double, in all shades of colors—the pure whites, with their quilled aster-like flowers, being most useful for wreaths; then the pinks, with delightfully fragrant blossoms, borne in abundance. Anemones have such brilliant colors that from a good bed one may pick out nearly any shade that is required. Aquilegias, or Rocky Mountain columbines, show a vast improvement on the old dull-colored garden variety. Ranunculus are very beautiful flowers, quite equal to anything that we get under glass. Sweet Williams are most useful for the same purpose, a bed of only two or three yards square yielding hundreds of fine heads of blooms. These plants do best treated as biennials—that is, sown in spring and as soon as large enough planted out in beds to flower the following year. A small space in the reserve garden should be devoted specially to the cut-flower supply, as it saves disfiguring plants of the same kinds in the beds and borders near the house, and when once a stock of these hardy plants is obtained, there is little difficulty in providing a full supply of flowers fit for cutting.

* * *

Nasturtiums.—But few know the value of the nasturtium as a bedding plant. We have a bed, ten feet in diameter, in a sunny place on the lawn—a bed, by the way, that has ever refused to look decent; no matter what manner of plant we put in, its appearance was ever the same—a slovenly bed. This may, in a measure, be due to a large maple at the north and a noble elm at the east of it, whose roots find there good feeding ground. This year we have filled it with dwarf nasturtiums, and success is complete. The whole surface is covered with rich green foliage in various shades, and flowers of dark

crimson, bright scarlet, spotted maroon, golden-yellow and creamy-white colors, so blended as to give the bed an ever-changing appearance.

There is another charm to be added, viz., its cheapness, for its cost need not exceed ten cents; one paper of good mixed seed will give sufficient plants. Sow the seed about the first of March, singly, in small pots, in the house. This is the way our plants were secured, and none could be finer.

* * *

Good Basket Plants for Towns.—And here is another use for the nasturtium, which we take from *Gardening Illustrated*: "The simplicity of the major nasturtium has, perhaps, operated against its use in floral devices in favor of even less showy flowers, and to its exclusion from many situations that it might otherwise deservedly occupy. This is not cultivated in towns as it should be, having regard to its immunity from the influences of smoky air; yet we know of instances where the professional gardener, surrounded by a blaze of summer bloom, will always find space for a few nasturtiums. For basket-work in town conservatories they are the very thing, and the true amateur would frankly admit that they possess a unique appearance when so employed, their intense orange and deep maroon-colored flowers being highly attractive, and, being rapid growers and continuous bloomers, they are well suited for trellis-work. In baskets the seedlings should stand four inches apart, and twice that space should be allowed for outdoor work. Incidentally the yellow creeping-jenny (*Lysimachia nummularia*) may also be specified for baskets in shaded positions in dense town air. The flowers are numerous; this, being a native of moist, shaded banks, should be well supplied with water. Two clean growers for the same purpose are the wood ivy (*Hedera helix*) and the periwinkle (*Vinca major*). The latter should have good rich soil to do well."

* * *

New York Horticultural Society.—We are frequently asked why this society has ceased to hold its monthly exhibitions, or if it is dead. As for the latter query we trust not, and consider it only a case of suspended animation. The facts of the case are the professional florists will not exhibit their flowers unless they are sure of receiving more in way of premiums than their flowers will bring in the market, and even then they will not exhibit if their customers want the flowers for their regular trade. This makes the exhibition business a very uncertain one; the exhibitors on the one hand are unwilling to take any risk, and the public does not want to spend its time and money unless it is moderately certain that both will not be lost. In other cities there are amateurs who are anxious and willing to send in their plants and flowers that others may enjoy them. There are *some* of that class in and around New York, but it is a sum in simple addition, very easy to reckon. As our plant-growers are, with but few exceptions, men of moderate means we can easily see why they cannot afford to exhibit on a scale that would do themselves or the society credit. But we cannot see why the millionaire should be the first to demand his awards when the society has not made half

enough on the exhibition to pay them. Perhaps if we were worth our millions we could understand it; as it is we can only conjecture.

* * *

Lilium candidum.—Again let us say that August is the best month of the year to take up and replant this, one of the most beautiful of all lilies, in order to have it in perfection the coming year. If the work cannot be attended to this month do not delay it longer than the middle of September. This lily makes a growth in autumn upon which the flowers of next summer mainly depend. Prepare a bed carefully by deep working and liberal enriching, avoiding in all cases heating manures. As soon as the ground is slightly frozen, cover the bed with newly-fallen leaves to the depth of three inches, using a few brush or evergreen boughs to keep the leaves in place, and next year you will have flowers in abundance.

* * *

A Banana Plant in Hartford.—Several weeks ago Messrs. Marks Brothers, the fruiterers, imported a banana tree from Baracoa, and placed it in the yard of their residence. It has grown considerably since and is a curiosity. The plant sends up two leaves, one inside the other, tightly rolled together until the green roll has grown two or three feet, when the blades unfold. These leaves are followed by others until the stems of the leaves have formed a smooth trunk, some eight or ten inches thick, composed wholly of these leaf stems. The new leaves resemble a calla lily in shape when maturing and previous to their spreading out. At the end of nine months a purple bud appears in the centre of the leaves. Its lengthening stem soon pushes the bud beyond the leaves, and it hangs down like a huge heart. As the purple envelopes of the bud fall off, rows of buds are disclosed. Each miniature fruit has a waxen-yellow blossom. Three or four months are required to ripen the fruit, and the plant is then withered and dries up or is cut down, to sprout again the next year. A plant bears but a bunch at a time. This plant in Messrs. Marks's yard is in excellent condition and is leafing finely. It will be placed in a hot-house in cold weather.

* * *

A Magnificent Conservatory.—Architect Ralph last week submitted to Superintendent Hamilton, of the Allegheny Parks, Allegheny, Pa., the plans of the Phipps Conservatory. The building will be divided into six plant houses, five of which will contain plants for pot purposes, and the sixth be utilized for growing show plants. Four of the houses, each of which will be 18 feet wide and 120 feet long, will be used for growing bedding plants. The fifth will be 22 feet wide and 120 feet long. The sixth house, or conservatory proper, will be 40 feet wide and 120 feet long. This, being the largest of the six, will be placed on the east of the block, because, if placed in the centre, it would be shut off from the sunlight, which, though it spoils the effect as to appearance, is a necessary matter to the smaller ones. A corridor, 10 feet wide, will be built next to the greenhouses, and another one-story building, 20 feet wide, will run north of the corridor and extend the full width of the other buildings.

The east and west corners of this last building will be finished with turrets, starting at the ground and running above the building. In the centre of this building there will also be a handsome porch, which will serve as the main entrance to it and the greenhouses. The eastern building will also contain the workshop of the greenhouses and the office of the Superintendent of Parks. The material proposed to be used in the construction of all the buildings specified in the plans will be stone for the foundations, brick for the hollow walls, with rafters of iron, and ridged iron plates for the roofs. The aisles of the greenhouses are to be of slate, while the benches and other things necessary to its furnishment will be of iron. Work has been begun in clearing the old penitentiary site of all the débris left after tearing down the buildings, and will be continued until completed.

* * *

The Tiger Iris (*Tigridias*).—About the time when the great flaunting petals of Kämpfer's iris died away and we bade adieu to the iris proper for a time, these gorgeous natives of Mexico burst upon us in all their glory of scarlet and gold. In the early morning sunshine these tigridias are very lovely. We have several kinds, but none finer than *T. grandiflora* and *T. pavonia alba*, the first bright scarlet and the last pure white, with purplish blotches in the cup. Seeing how gorgeous these tiger irises really are, and remembering how easily they may be grown, it is curious that they are not more plentiful. On cold, wet soils they should be taken up like gladioli and laid on the floor of a cellar or shed from which frost is excluded. Here, on our light sandy soil, they are perfectly hardy, but a covering of ashes or cocoa-nut fibre would save them in most localities.—*Exchange*.

* * *

A Beautiful Alpine Plant.—A plant of one of the most beautiful gems of the Alpine region, lying to the north of the Adriatic, has been sent to the London *Garden* by Messrs. Backhouse, of York. It is called *Edraianthus serpyllifolius*, var. *atropurpureus*, a near ally, if not actually a campanula. It is a dwarf plant, with slender, trailing shoots, not straggling, but growing in tufts. The flowers are one inch across, erect, and of a deep, rich purple. There are over a dozen large flowers on the small plant sent, so we can imagine what a mass of it would be in the rock garden. It grows well, Messrs. Backhouse say, in the rock garden in calcareous soil.

* * *

Roses as Hedge Plants.—The South utilizes many of the more tender roses as hedge plants. With us at the North the same system has been attempted with the prairie roses, and the result, when proper attention to training has been observed, is very gratifying. Of this class, *Prairie Queen* and *Baltimore Belle* are favorites, planted alternately, thus making, when in bloom, a grand show of pink and white flowers. An ordinary wire fence—barbed wire is more defensive—makes a good groundwork for such a hedge, and then training and pruning must never be neglected while growth is active. The rose is also especially adapted to massing, and a bed,

whether large or small, composed exclusively of either of the following, will prove effective: Jacqueminot, Washington, Mme. Charles Wood, for red; La France, Anna de Diesbach, La Reine, for pink; Coquette des Alpes, Caroline de Sansel (almost white), and Mabel Morrison, for white. These are all hybrid perpetuals, but their places may be substituted with ever-blooming kinds, which will give a greater profusion of flowers, although not so hardy as the foregoing.

Books, &c., Received.

Transactions of the American Horticultural Society (formerly the Mississippi Valley Society), Vol. III. This volume fully sustains the good impression made by the previous volumes. We consider it one of the best horticultural publications in our library, and should advise all who wish entertaining and useful reading to send \$2.30 to the secretary, Prof. W. H. Regan, Greencastle, Ind., and secure the three volumes.

Premium List and Regulations for the Forty-fifth Exhibition of the Queens County Agricultural Society, to be held at Mineola, N. Y., September 21 to 24. This, we believe, is the only society in the State that offers to amateurs more than \$250 in premiums for the best displays of plants and flowers.

Southern Bivouac. We welcome to our exchange list this literary and historical magazine, published monthly at Louisville, Ky. Those who wish to read "the other side" of our war history will find here the story told in a way that cannot but interest and instruct. "The First Day of the Real War" is a most fascinating paper.

The Horticultural Times and Covent Garden Gazette. We welcome this "weekly" to our exchange list. It contains much information of real value, as well as of interest, to American readers, and the low price, \$1.00 per year, for which it is furnished ought to secure a large subscription list in this country.

Descriptive Catalogue of Strawberries grown for sale by Ellwanger & Barry, Rochester, N. Y.

Report of the North Carolina State Horticultural Society for 1885.

Answers to Correspondents.

New Plants.—*Mrs. Joshua Rudy*.—We cannot say where the plants wanted can be obtained. Many of the new plants we notice are not yet to be found at our leading florists and some of them only in botanical collections. Our advice is to consult the best catalogues. Some of them may list what you desire.

Plants for Name.—*Mrs. T. B. Dickerson*.—Specimen badly broken, but it is a verbascum (mullein), probably *V. Blattaria*, a plant quite common, naturalized from Europe.

S. H. Clark.—The plant sent is *Lychnis vespertina*, evening cockle.

NEWSPAPER WAIFS.

—Owing to the strained relations between the two countries Canadian mammas who visit American beaches will not be permitted to fish in our matrimonial waters.—*Lowell Citizen.*

—Mr. Hayes—"My dear, many of my friends are urging me to run for Congress." Mrs. Hayes—"You run for the Indian meal, Rutherford, and feed the chickens. That's better than running for Congress. And get this morning's eggs from the barn, and then I'll tell you what to do next."—*New York Sun.*

LOTTA.

It was always a marvel to the amusement-loving public how Lotta could be so sick that the Chestnut Street Opera-House, Philadelphia, was compelled to be closed for one week, about two years ago, and that at the end of that time she was well enough to resume her play of "Nitouche." More than this it was noticed that her voice had acquired fresh volume, and in "Nitouche," which is a singing play, she could be heard in ensemble as well as in solo. Among all the gifted ladies who adorn the stage, Lotta is decidedly the pet and favorite. Her intense vitality, her beauty, and the versatility of her talents draw all classes to see her. She has been on the stage since her eighth year and in all that time the breath of scandal has never once assailed her. She is a phenomenally devoted child to her mother, in whose society she is found at all times. Can it be wondered at that this little lady returned so soon to her labor at the Opera-House when we remember that this speedy restoration was due to the inhalation of Compound Oxygen? A press correspondent writes: "It was at the residence of Mrs. James H. Heverin of Delancey Place (wife of the eminent counselor) that I obtained a brief interview with Lotta in reference to the treatment of Drs. Starkey & Palen, which prevented her a great pecuniary loss. The little comedienne was spending the day there, and as she answered my card she came bounding into the parlor, throwing herself into a luxurious arm-chair, and as soon as the formalities of a visit were complied with, I at once broached my subject.

"I hear you have tried Compound Oxygen treatment, Lotta?"

"Oh, yes! You remember the terrible sore throat I had two years ago—that baffled the skill of my New York physicians? After burning my throat and positively prohibiting my appearance before an audience for an unlimited time, I was promised great things if I would try the 'Oxygen,' so I immediately came to Philadelphia and put myself under the care of Drs. Starkey & Palen."

"Did you experience relief immediately?"

"It was evident from the first inhalation that I had done the right thing, for it seemed to bring the whole trouble under immediate control."

"Then you do not favor burning the throat or any of the methods usually resorted to?"

"No. I think it is a harsh and cruel treatment and it cannot be long before Compound Oxygen will come to the rescue of all the profession."

"Drs. Starkey & Palen claim that the health obtained by the Compound Oxygen treatment is as genuine and permanent as one's original health. Does your experience confirm that opinion?"

"Yes, it most certainly does. I have not been sick an hour since I used the Oxygen. My mother has also been greatly benefited by the use of the Oxygen and is as great an enthusiast as I. It seems to invigorate the whole constitution and imparts fresh life to every part of the body. In my profession I am always studying from nature. I observe the expressions, gestures and ways of the various people with whom I meet, and find that my power of observation has grown more acute and discriminating since my treatment with the Oxygen. In the voice alone there is a most perceptible gain. Long and sustained notes have become easy and whether talking or singing I find it now no labor. Persons who sing or talk much on stage or platform feel a certain amount of exhaustion at the end of the season and to them the use of the Compound Oxygen would be of great value. I wonder these gentlemen have not brought it to the notice of the

acting profession before. It is just what we all need."

"Do you think it would have the same effect on the system as change of climate?"

"Yes, and without the disadvantages of long journeys in pursuit of health, such as the loss of home comforts and the interference with regular business pursuits."

"Did you have any unpleasant sensations while taking the Oxygen?"

"No, on the contrary, the sensations were pleasant."

"Do you give your full consent to make this interview public?"

"I certainly do. You are at liberty to say I said so."

Miss Lotta is one of the busiest little ladies in the world. Her engagements are continuously requiring her presence in the cities each season. She owns theatres and real estate in America and Europe, and large tracts of wooded land in the Northwest; indeed she is one of the wealthiest ladies of the stage. Lotta is modest about her own merits. She believes the test of talent is public appreciation. Surely no one has passed this test with greater éclat than this gifted lady, who is still young and fresh. Now if the Compound Oxygen can bring back to the stage each year this favorite and pet, in prime health, the public can but thank Drs. Starkey & Palen. Any who may desire to know more of the treatment of which so kindly words are spoken should write to the office of the physicians, 1529 Arch Street, for the literature on the subject, which is mailed free to all applicants.

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Is made from the choicest quality of stock, and contains a LARGE PERCENTAGE OF GLYCERINE; therefore it is specially adapted for Toilet, Bath and Infants.

NEWSPAPER WAIFS.

—Little Girl—"Mamma, why doesn't the sea run over if all the water flows into it?" "Nonsense child! Don't you know it's full of sponges?"—*Burlington Free Press.*

—A Nautical View.—Mamma—"Don't you know that your father is the mainstay of the family?" Freddy—"Golly, ain't he, though, and the spanker, too!"—*Life.*

—"I meant to have told you of that hole," said a gentleman to his friend, who, walking in his garden, stumbled into a pit of water. "No matter," said the friend, "I have found it."

—Friend (taking leave, after spending the evening)—"Admirable talker your wife is, Brown. I could listen to her a whole night." Brown (with sigh)—"Ah! I often do!"—*London Punch.*

—Little Gertrude, a fat, grave personage of two years and a half, had given her mother a hug of unusual fervor. Said the latter, "What makes you love mamma so much to-day, Gertrude?" "Well, mamma, I must make myself agreeable."—*Harper's Bazar.*

—"Well, how did you like the sermon Sunday?" we heard one lady ask another on the court-house pavement recently. "The sermon?" "Yes. You were at church, weren't you?" "Yes, certainly." "Well, then, how did you like the sermon?" "I didn't hear any sermon; I belong to the choir," was the self-satisfied rejoinder.—*Chambersburg (Pa.) Repository.*

—Old Rogerson is a plain, everyday sort of a chap, but he has a faith that is very refreshing in these days of scepticism. Being asked the other day if he wasn't sometimes fearful of the outcome of all his work on the farm, he replied with homely eloquence, "No, sir, not a bit on't. I'm willin' to trust in Providence, and if we don't have a drought and I can keep the pesky bugs out o' the potatoes, I haven't no fear but the crop'll turn out all right."

—At a funeral in North Carolina a few days ago the coffin arrived at the grave just as the sexton had finished inspecting some of the dirt thrown up, and discovered indications of gold. A hurried consultation was held with the widow of the deceased, and she was asked whether she would go ahead and work the claim or fill up the hole on the old man. "I guess we'll take the coffin over to the barn and leave him there for a few days," she replied. "If there's gold here I want it, and if there isn't any, why, he won't be no wuss off. Jacob never was no hand to kick, anyhow, and it's too late for him to begin now."—*Wall-Street News.*

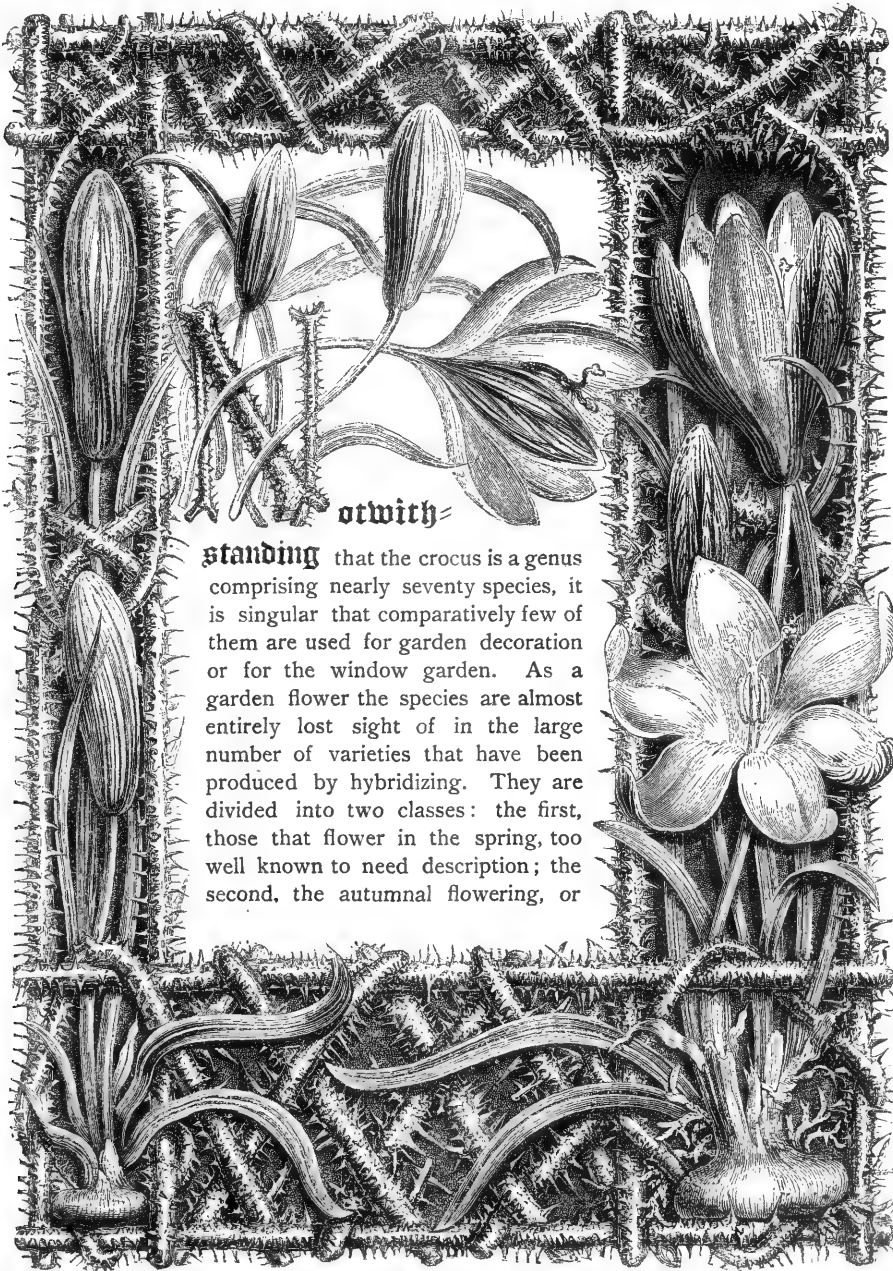
LADIES' FLORAL CABINET.

H. W. TAYLOR

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standing that the crocus is a genus comprising nearly seventy species, it is singular that comparatively few of them are used for garden decoration or for the window garden. As a garden flower the species are almost entirely lost sight of in the large number of varieties that have been produced by hybridizing. They are divided into two classes: the first, those that flower in the spring, too well known to need description; the second, the autumnal flowering, or

naked crocus, so called because the flowers are produced in the absence of leaves, which, with the seeds, are thrown up in the spring. The plants of this latter class, excepting in a popular sense, are not crocuses at all, and are included in the genus *Colchicum*.

Both the vernal and autumnal species are particularly desirable, as they produce their flowers at times when flowers are doubly welcome, early in spring and in September. The spring crocus is of the easiest culture, and we need only to remark that it is a mistake to put them into poor ground, since no plants in our garden more fully appreciate, or make greater returns for liberal treatment as respects good soil and culture. They demand a dry soil and situation, and in such they flower profusely. The bulbs, or more properly corms, should be planted at least three inches deep, for, as the new corms form above the old ones, they will in three or four years push themselves out of the ground if planted too near the surface. As often as once in three years the corms should be taken up, separated and planted out as quickly as possible. The longer they are left out of the ground the weaker they become and the later they will come into bloom. In starting a new bed with imported corms they should be planted as soon as they can be obtained, which is usually the latter part of August. If left until frost has destroyed all manner of vegetation in the garden, as is too commonly the case, very few, if any, will flower strongly the coming season, and none

satisfactorily. When left in the ground they commence new life about the first of September, and before winter they have their preparations for spring work complete; the flower buds will be nearly their full length above the corm, ready to burst forth into bloom on the first sunny days in March. One of the peculiarities of the crocus is that when it is in flower the germen, or seed-vessel, is still under ground, almost close to the corm and is not visible until some weeks after the flower has decayed, when it emerges on a white peduncle and ripens its seeds above the ground.

The situation for the crocus bed should be a warm one and before hard frosts it should be mulched two or three inches with leaves or coarse litter, which is to be taken off as soon in spring as the season will warrant. For varieties and descriptions the seedsman's catalogues may with safety be consulted, as they are invariably correct.

C. sativus, which is the type of the autumnal flowering species, should be planted in midsummer and it will come into flower in September. One may associate with this the showy yellow *Amaryllis lutea* with advantage, as it flowers at the same time and the rich lilac-rose color of the former contrasts finely with the latter. Bulbs are cheap and multiply rapidly. It is more important to plant these early than it is with the spring-flowering varieties, as they will come into flower at the proper time, whether in the garden or on the seedsman's counter.

PRESIDENT THORPE'S ADDRESS TO THE SOCIETY OF AMERICAN FLORISTS.

IT is again my pleasure to greet you, and I do so with unbounded satisfaction. I am proud to say that the two-year-old seedling is developing finely, and already shows signs of bearing good fruit. I can see in the near future the Society of American Florists taking a position equal to any organization in the country. The best talent in our profession is heart and soul with us and is ready and willing to make its mark.

LOOKING AHEAD.

When the society gets more deeply rooted and is well stayed from every quarter, I hope to see one of its branches shaped into an experimental garden where inventions, appliances and structures of all kinds can be displayed; attached to it there shall be also a good library. This is a branch worthy of the support of those fortunate individuals who have not only bountiful wealth but liberal hearts to bestow it; with such assistance we could spread, octopus-like, into every town and village in the country.

Another branch should be the establishment of local exhibitions controlled by committees appointed by the society, whereat new and desirable plants and flowers shall be reported upon, thus giving encouragement to those members who are debarred from taking part in competitions where distance is too far from the large cities.

I hope to see established on a sound basis yet another branch, in the shape of a mutual benevolent association, which shall be so trained as to afford shelter for those members who are overtaken by misfortune. This would

be of incalculable good. Perhaps this is not the time to handle such an important question, but I think it will be well for us to ponder over it, as the sooner all good undertakings are begun the better for those concerned. Would it not be wise for us to appoint a committee to report as to the best methods of forming such an association at our next general meeting?

We must also be patient and persuasive in insuring the first side-branch that grew to make a fresh start; from some cause or other it (the hail question) got checked, and I do hope that before the termination of this meeting we shall have solved the question.

These, then, are a few of the bristling shoots of the society which require attention.

THE PROGRAMME.

We present to you to-day a programme rich in those topics in which we are the most interested. Indeed, if signs do not fail, we shall have such a fund of information to digest as to give us material for next year's consideration.

BUSINESS OUTLOOK.

During the past year business on the whole has been equal to that of previous years, excepting, perhaps, in some localities. The unfortunate labor troubles during the spring caused a falling off in the sale of market plants. By market plants it will be understood that I refer to those plants which are grown and sold in flower; for, be it remembered, mechanics and artisans, with

their wives, are large buyers of plants when labor is not in the throes of disturbance. The sales of cut-flowers have been greater than ever. Stock of the finest quality never sold higher, on the average, and it truly can be said that stock of poor quality never sold lower.

No radical change has been made as to new additions or eliminations of varieties. Of course, roses are in the van, followed by a longer list than usual of other flowers.

Many varieties of summer-flowering plants are now grown for cut-flowers, and meet with ready sales in limited quantities. A few years since nearly all the flowers sold at this season were those used only for funerals.

The demand for good roses (at really good prices) was more than the supply during June and part of July, and some growers are providing a supply for "all the year round," which is another milestone on the progressive way.

The new roses, *American Beauty* and *Wm. F. Bennett*, introduced in 1885, have proved so far very desirable, and may be safely placed among the list of good things. The new candidates this year are the *Bride*, a sport from *Catherine Mermet*, which seemingly has all the good qualities of its parents, and *Her Majesty*, which as yet has not had a fair opportunity to flower.

EXHIBITIONS THE CAUSE OF DEVELOPING THE BUSINESS.

There are so many divisions in our calling that what I have to say is applicable to all. Don't be afraid to exhibit whatever you have to dispose of. Do it always. Make exhibitions, join your local societies and be there with something. Never mind if you do not happen to secure the first prize; everybody cannot have the first prize until the millennium; go again and show next time. While you are aiming to get first prizes you are doing good to your business and floriculture generally.

If there had been no exhibitions half of the number of florists would not be in the business and the other half never could have come to Philadelphia to-day.

Exhibitions made *Baroness Rothschild*, *Magna Charta* and *Paul Neron* roses realize the prices that they have. Exhibitions made the forcing of Dutch bulbs assume such proportions. Exhibitions made the sale of chrysanthemums for the past two years foot up to a million of plants. So don't go away with the impression that exhibitions are useless, and that if you do not happen to have a roll of bills to take home with you from each one that you are the loser. You are sowing the seed, the crop from which will be harvested as it ripens—the more you sow, the larger the crop.

Some, I am sorry to say, are not interested in public exhibitions, from the fact that they are always thinking of the cost and too much of the time; but I can assure you that it is money and time well expended.

By the aid of the press, even outside of the professional, the society has obtained a very widespread reputation. We cannot forget how much interest the Cincinnati press took in our first convention. Nearly all the professional papers and magazines also had representatives there and the society is greatly indebted to them all. It was there that the *American Florist* and *Popular Gardening* made their first appearance.

The country is still in need of a comprehensive, well-managed horticultural weekly, one that will give sound information on all gardening matters in such a manner as to be easily understood by our many patrons who are pining for correct information.

The backbone of the florist's business has been much strengthened the past few years by the accession of so many gentlemen having a taste for floriculture and the means to gratify it. It is to this class that we have to look for our best support. Many build fine houses, lay their grounds out tastefully and at once begin to look around for something more. First, perhaps a half-dozen roses and the same number of shrubs are bought of some itinerant agent; though the prices charged are high and the roses do not bloom every day, nor the shrubs have scarlet and blue flowers on at the same and all the time, the ground has been turned over and an interest awakened. This is followed by the addition of a bed of roses from the local florist, then a plantation of bulbs and so on until in a short time a fine collection is gathered together and the next gentleman becomes interested. This is a trade worth cultivating, as in nine cases out of ten the actual money outlay is not a consideration when satisfaction is given. To illustrate what can be done by such an acquaintance I will relate to you what occurred to a friend whom you all know.

It was a blustering day in March, 1883, when a ruddy-faced gentleman and his groom, in a two-wheeled vehicle drawn by two horses, tandem, abruptly pulled up in front of our friend's greenhouses. The gentleman, alighting, asked for someone who could sell him roses, and remarked that he wanted none but the best plants, but must have the following kinds: *Ma Capucine*, *Niphetos*, *Cooks*, *Mermets*, *Souvenirs*, *Perles*, *Cusin*, *Bon Silenes*, *Magna Charta*, *Baroness Rothschild*, *Jacques*, *Anna Diesbach* and *Marechal Neil*. Our friend the florist listened attentively, and then the following questions and answers were given:

FLORIST.—What do you intend doing with these roses?

GENTLEMAN.—I want them to plant in my garden to flower all summer.

F.—How did you obtain such a list?

G.—I have always been interested in roses, and so during the winter, whenever I have attended either a dinner or reception I made it a point to get the names of the roses from whoever I could, so as to have the best, and the list I have given you pleased me the most, as I saw the flowers, and I want them to live out all winter.

F.—Well, out of the whole list you have given me there are just four varieties that will answer your purpose. I can supplement those four by twelve or more kinds that will give you satisfaction.

Which he did, and the result was that this same gentleman has to-day five hundred roses in his garden because he was well advised. He wants now all the new roses that will fill the bill. Last year he obtained six plants of *American Beauty* at three dollars apiece; this year six of *Her Majesty* at two dollars and a half each; and this is not all, for he advertises our florist friend among all his friends, and I know that this same florist has done over \$2,000 worth of business. Why? Because when the

list of roses so unsuitable for the purpose was condemned and suitable ones recommended, confidence was gained and they became fast friends.

AMERICAN SEEDLINGS.

The raising of new varieties of plants from seed, I am glad to say, is receiving more attention than formerly; but yet this is not carried out to the extent that it ought to be.

This is a branch of floriculture worthy of the greatest encouragement and is fraught with a great amount of good, as we are to-day too much dependent upon importations for our new introductions. The new varieties obtained from importations are about 95 per cent. against home productions, and when it is acknowledged that as a rule more than two-thirds of those imported are never heard of after the first or second year's cultivation, it is time for us to be up and doing. I know it is frequently remarked that we have already too many varieties of plants and flowers and that the old varieties are good enough. If this doctrine had always been believed, where should we look to-day for our *Perle des Jardin*, *Mermet*, *Bride*, *Bennett* or *American Beauty* roses, our *Grandiflorum chrysanthemums*, *America verbenas*, or *Golden Dawn geraniums*? In fact, none of the fine varieties of flowers grown to-day would have ever been known had those to whom we are indebted for the best of everything believed that the old varieties were good enough. I want to impress upon you all that the very best old varieties were once new. In connection with this I wish to say to the young members of our society that as soon as ever you get back again to business select some popular plant for improvement. Begin raising seedlings by judicious cross-fertilization and careful selection, use sound judgment in laying the foundation and a model to guide you in building; then, by patience and perseverance, the results will be more than satisfactory; furthermore, I can promise you, after long years of experience, one of the most delightful pursuits there is in the world. The task is never finished and, with perseverance, results far more than expected will be realized.

I am afraid I cannot guarantee you very large fortunes of money in following this particular line of business, but you can make a fortune of another kind, such as *Bryant*, *Emerson* and *Longfellow* made and left us. We are

the poets in our spheres and those who are devoted to the raising of new varieties will be remembered, if not as millionaires, as having contributed something toward life's enjoyment.

We have reason to congratulate ourselves over what the society has accomplished during the past year. It will be remembered that we had to fight an obnoxious postal bill in Congress, which proposed to double the amount of postage on all plants, bulbs and seeds. With the interest which the members have taken, and the work of the committee that visited Washington to oppose the passage of the bill, no change was made in the rates of postage. Now, I maintain that if the society has done no further good than to defeat this bill, we have reason to be well satisfied.

I will ask you to consider at this meeting a plan of electing members, wherein we shall have some protection against imposition. We have been very happy together so far, and I think we should endeavor to keep so. If nothing more is done, candidates for membership should be indorsed by at least two members.

And now comes the saddest part of my duty. I have to report that four of our members have been removed by Him who will ultimately remove us all. First on the list is *William Bennett*, a man known the country over as a thorough horticulturist, equally as well informed in all of its branches; a grower of plants without an equal; a genial friend, loved and respected by all who knew him.

Second is *Hy. J. Sackesdorff*, who had established himself as one of the most expert rose-growers. Ambitious, honorable, full of knowledge, desirous to please, his late employer pays high tribute to his work.

Third, *James Hodges*, a man long connected with the profession and greatly respected.

The last one is *James Young Murkland*, a member of our executive committee, for eight years the secretary of the New York Horticultural Society, secretary of the American Seed Trade Association and connected with the house of *Young & Elliott* for twenty years. He was one of the shining lights in his profession, was devoted to horticulture, most brilliant in conversation, a veritable encyclopædia of knowledge, full of ambition and no truer friend ever lived. His loss to us all is irreparable.

A ROYAL BOUQUET.

IN a dingy little street in the then poverty-stricken and somewhat grimy town of Leicester lived, thirty years ago, a pale, middle-aged "stockinger." In the front room of the little house—it contained only four rooms—were the stocking-frames at which he and his wife sat, back to back, busy with feet and hands the livelong day at the rattling, screeching machines. By dint of hard labor the pair would earn between them, perhaps, a dozen shillings a week all told, and out of this would have to come rent, firing, candles, living and clothing. A careful observer, however, would divine that this stocking-maker

was no ordinary man, but a patient, thoughtful worker and waiter for the knock that *Dame Fortune* is supposed to give—once at least—at everyone's door. The man had an inventive genius, and employed his short but well-earned leisure in constructing tiny models of a machine that should utilize the properties of india-rubber in an elastic web. His invention was patented, large factories were built, and the industry within a few years gave employment to thousands of nimble fingers and willing hands. The stockinger rose rapidly to wealth and position, and was elected mayor of the ancient borough of

Leicester. What now will he do with his leisure? What is to be his hobby? He had wealth and leisure, and intelligence enough to enjoy the fruits of them.

It is scarcely matter of surprise that his hobby was an expensive one, yet, no more strange than true, it was orchids! His house was situated near the factory, and he at once set about erecting suitable houses, and engaged one of the foremost orchid growers of that time, Mr. Bullen, as his head gardener, sparing no expense in the purchase of the most costly species and varieties of this beautiful family of plants. With a view to competition at the Great Exhibition of 1862, Luke Turner—that was the name by which he was familiarly spoken of—did nothing by halves, and gave orders for the construction of vans specially suited for the conveyance of his pets. The magnificent bank of orchids was, it is needless to

say, immensely admired by the multitudes of visitors, and won the gold medal awarded by the Horticultural Society. Among the many who lingered to admire Mr. Turner's orchids were the Prince and Princess of Wales. As they passed to their carriage, the proud exhibitor, touching Sir Wentworth Dilke on the arm, asked him if he thought the Princess would accept a few blooms, and, on being answered in the affirmative, took a knife from his pocket and cut from his plants an armful of the costly flowers, which he carried to the royal carriage. The gift was, as a matter of course, gracefully accepted and the donor especially thanked. Probably the magnificent sprays of bloom formed one of the most expensive bouquets ever presented, even to royalty, and, considering their beauty and rarity, might have been valued at a hundred guineas.—*T. W., in Gardeners' Chronicle.*

FLORICULTURE IN THE UNITED STATES DURING THE PAST FORTY YEARS.

Read before the Society of American Florists, at the Annual Convention, held in Philadelphia, Pa., August 18th, 19th and 20th, 1886.

LIKE nearly everything else in this fast age of the world, floriculture has made an astonishing advance in the past forty years, and when we look back we wonder why our operations in many things were so primitive and crude.

Forty years ago I doubt if on the whole continent there was in use for commercial purposes a greenhouse having a fixed roof, at least I have no remembrance of ever having seen one until about 1857, when the system was advocated by Peter B. Mead, in the New York *Horticulturist*. Previous to that time all greenhouse structures for commercial purposes were formed of portable sashes, and nearly all were constructed as "lean-to's," with high back walls, and none were connected—all were separate and detached—placed at all angles, without system or plan. Then the heating was nearly all done by horizontal smoke-flues, although here and there some private individuals for their own use made a crude attempt to heat by hot water as early as 1835; but the first use of heating by hot water on anything like a large scale was done in 1839, by Hitchings & Co., who heated a large conservatory for Mr. William Niblo, of New York; and from that time until nearly twenty years after heating by hot water was almost exclusively confined to greenhouses and graperies on private places, as few professional gardeners in those days could afford to indulge in such luxuries. All the work had to be done by smoke-flues, which, together with the greenhouse structures, was usually the work of their own hands.

Heating greenhouses by steam, to the best of my information, was unheard of in the United States at that date, though I am informed by Mr. Isaac Buchanan, of New York, that when he was employed in the Botanic Gardens of Edinburgh, Scotland, as early as 1830, the greenhouses there, which consisted of some 15,000 square feet of glass, were successfully heated by steam, but that later, for some reason, this method had been abandoned and hot water had been substituted. So it would appear

that the use of steam-heating with us to-day is, like many other things in human progress, but the revival of a lost art.

To give an instance of how excellent methods long in use have been abandoned and forgotten, I may mention that some fifteen years ago, when on a visit to Philadelphia, I called on our friend, W. K. Harris, who showed me where, with one fire, he successfully heated a greenhouse, 20x100 feet, by the excellent plan of returning the flue so that the chimney was placed on top of the furnace. It was no doubt original with Mr. Harris, and I gave him the credit of the invention, which I described in the *American Agriculturist* of that date. But it had no sooner been printed than a gentleman in Salem, Mass., wrote me, saying that if I would refer to the "Transactions of the London Horticultural" Society for 1822 I would find the same plan there described; but, like many other valuable things, it had been lost sight of and forgotten, for there were few books and fewer magazines obtainable by the gardeners in those days.

In this country heating greenhouses by steam for commercial purposes was, I believe, first successfully practised by E. H. Bochman, in Pittsburgh, about 1875, but it is only in the past five years that its merits have been so fully proved.

Progress is slow in many things, mainly for the reason that publicity is not given to new ideas; hence the great value of such an association as ours. It is somewhat singular that few, if any, of the large greenhouse establishments in England yet use steam; and it may be that we are yet to show them that it is not only much cheaper but, I believe, also the best method of heating any greenhouse structure having 5,000 square feet of glass.

Not only has a great advance been made in the structure of greenhouses and their heating, but methods of propagating and growing plants have also been much improved upon. The propagator, forty years ago, for the few large establishments in the country, was generally

imported from England, and was usually a most important personage—often full of mystery and overweening conceit, who guarded his knowledge, of which he had often not a very large stock, with a miser's hand. One of these gentlemen was a sort of autocrat in the greenhouse establishment of the late Robert Buist, when I worked there in 1844. He not only refused to impart any knowledge that he possessed on the subject, but actually locked the door of the propagating-house against all his fellow-employees; and he was sadly put out one day when a sarcastic wag tacked to the door the following transposition of Goldsmith's famous couplet:

“And still we gaze, and still the wonder grows,
How one small head can carry all he knows.”

We are glad to know that few of that ilk can get a foothold here to-day. The knowledge of propagating has now been so diffused by books and magazines devoted to floriculture, and the rules laid down are so simple, that all the mystery that was thrown around it in those early days has been dispelled. But every now and then, even now, we find some fellow arrogating to himself some “special secret” in our trade. There are no secrets in horticulture. The laws that govern the germination of a seed, the rooting of a cutting, or the taking of a bud or graft are the same now as they were a thousand years ago, and anyone pretending to a “special” knowledge (unknown to others) in the matter is either an ignoramus or an impostor. Of course, experience or special advantages give a knowledge that the want of such cannot give. But the underlying principles never change, though undoubtedly in the methods of making them available we have made vast strides in this country, particularly in the matter of propagating, in the past twenty years. Whether we have made much advance in the classes of plants grown now, from what was grown forty years ago, there may be some question. Certain it is that there were many fine varieties of plants then grown which we fail to find to-day, particularly in the hardwooded or New Holland section, such as heaths, epacris, corraëas, pimeleas, &c. Mr. Buist, of Philadelphia, and Mr. Hogg, of New York, over half a century ago, both had collections rich in these classes, together with nearly everything desirable in stove and green house plants, but they gradually became diminished, as it was found that their culture was attended with special care in our hot and dry summers. Sales diminished in consequence, and their collections were allowed to run down, to be replaced by such plants as were found to be better adapted to our tropical summers.

But the most wonderful advance in floriculture has been in the construction of cut-flowers into bouquets and other designs. Forty years ago, in New York, in constructing a simple hand bouquet, some of us did not know enough to use a thread to keep each flower in place as the construction went on, and it was some years later that the centre stick was used to steady the structure. The wire-design man did not put in an appearance until nearly twenty years later, and when a cross or wreath of flowers had to be made, the cross was usually constructed with pieces of lath, on which the flowers

were tied, and the floral wreath had the groundwork of a piece of old barrel hoop or a willow twig. The bouquet was usually a one-sided affair, the groundwork being a flat bunch of arbor vitæ, through which the flowers were drawn. Occasionally a round bouquet was attempted by some artist of local fame, but with a result that must have done violence to the feelings of the poor flowers that were used in the structure.

The character of the flowers used for cut-flower purposes has also been radically changed. Forty years ago camellia flowers freely retailed at \$1 each, and Philadelphia used to send thousands to New York florists at the holidays, getting \$500 per 1,000; while roses were then going a begging at one-tenth of that sum. Now the rose is queen indeed, and the poor camellia finds none so poor as to do her homage. The culture of tuberose came a little later. I find, from an old schedule of prices, that in 1865 tuberose were quoted in November at \$8 per 100, and a reference to my own books shows that in that year my receipts from a house (10x100 feet) of tuberose were \$1,500 in November; now they are rarely sold at all in New York, unless to the poorest class—*Dame Fashion* has stamped them out, as she, twenty years before, stamped out camellia flowers—and just here comes the question, may there not be danger of a rebound in the rose “boom?” May there not be danger ahead in placing so many eggs in one basket, fascinating though the basket be?

The increase in the sales of all products of floriculture in the past forty years has certainly kept pace with most other industries and has probably exceeded many. In January of 1844 I was employed by a New York florist, who did nearly the whole business of the city at that time. His sales of cut-flowers for New Year's Day of that year footed up the sum of \$200. I have but little doubt that the aggregate sales of cut-flowers in the city of New York on the 1st of January, 1886, were not less than \$100,000, and the aggregate for the past year cannot be short of three millions, which is probably twice that of any European city of its size. An equal advance has been made in the output of plants. We have good reason to believe that Mr. William Elliott, the well-known horticultural auctioneer, of New York city, often sells more plants in two hours from his warerooms than were sold during a whole season by the florists of New York in 1844. I know that he repeatedly sells at one sale 50,000 plants; and it is exceedingly doubtful if that number was sold in New York during the whole year of 1844. The past season there were probably shipped and sold in the market and at auction not less than 50,000,000 of flowering and ornamental plants, of which perhaps one-tenth was sold at auction. The aggregate value of the sales can only be approximated, but I should think it safe that the average would be quite five cents apiece, or \$2,500,000. E. L. Taplin, a most careful writer, in an article in the January number of the *FLORAL CABINET* for 1886, says:

“According to the best information, there are over 8,000 florists established in business in this country who, with their workpeople, make a considerable showing in the population. The number of Americans en-

gaging in the business increases yearly, for though England contributes the largest quota to the trade, with Germany and France following closely, Americans are now waking up to the possibilities of the business. Allowing 400 feet of glass-covered surface to each florist—a low estimate—would give a total of 3,200,000 feet, or 630 acres of glass surface. Last year the trade sold 24,000,000 cut roses, and 120,000,000 carnation flowers."

If the business increases in the same ratio for the next forty years, rest assured the now somewhat humble florist will have a place in the community; that the increase will be even greater there is good reason to believe. In the early days of floriculture, nearly all the men engaging in the business were Old Countrymen, who had been

private gardeners, often lacking in education and intelligence, and utterly untrained, from the nature of their occupation, in business habits. Now hundreds of young men, with better opportunities of education, are training direct in the business in all sections of the country; and I think it safe to predict that the leading florists forty years hence will be far better business men than even the most prominent among us now. And it may be that, when the Society of American Florists meets again, in this good old city four decades hence, some other veteran, now a stripling here to-day, will tell, as I have done, of the primitive ways of the craft as practised "forty years ago."

PETER HENDERSON.

JERSEY CITY HEIGHTS, N. J.

HYBRID PERPETUAL ROSES FOR OUTDOOR SUMMER BLOOM.

IT is, perhaps, unnecessary that I should go into the history of the rose, as that is a subject that has been so often and so fully discussed by others more competent than myself. I will, therefore, only remark that the rose has been the acknowledged "queen of flowers" for over 2,000 years. It was Sappho, I believe, who first christened the rose the "Queen of Flowers," and it still maintains that distinguished position, and probably will ever continue to do so. I might here quote a few lines from her writings:

Would Jove appoint some flower to reign
In matchless beauty on the plain,
The rose (mankind will all agree)—
The rose the queen of flowers should be.

Hybrid perpetual roses are so called from crossing the hybrid China and hybrid Bourbon with the China, Bourbon and tea-scented varieties, by this means obtaining semi-perpetual blooming roses, which were named by the French growers *Hybrides remontantes*, that is, roses that throw up flowers again. They are among the most beautiful of our summer-flowering roses, having size, color and fragrance combined. They are of quite modern origin, the first of the race only dating back to 1837. At first there was a great similarity in color, but the improvements made during the last thirty years have been so great that we now have almost every shade of color, except yellow and blue.

CULTIVATION.—If a permanent rose-bed is desired, with the view of growing fine roses fit for exhibition, it will be necessary to choose an open situation, but protected from cold, cutting winds, and then ascertain what the subsoil is. If of a wet, clayey nature it should be thoroughly drained, after which the ground should be trenched eighteen to twenty-four inches deep, mixing with it during the process some good, rotted manure and an occasional sprinkling of coarse ground bone. A bed thus formed will last for years and will well repay the extra expense of making it. But for persons of limited means, or those who have only a city garden and who wish to grow a variety of plants in it,

I would recommend that whenever a rose-bush is to be planted the ground be dug out one foot square and eighteen inches deep, then filled in with some good, turfy loam, having some rotted manure mixed through it.

PLANTING.—Some prefer to do this in the fall, but from my own experience I prefer to plant in the spring as soon as the ground can possibly be worked, for when done in the fall the plants are apt to be thrown out of the ground by the action of the frost, so that in many instances the work has to be done over again. In planting, roses on their own roots are to be preferred, but these cannot always be obtained; besides, there are some kinds that succeed better worked than on their own roots. When worked plants are used they should always be planted deep enough for the stock to be completely buried in the ground two or more inches, for, when this is the case, after a time the plant will throw out roots above the stock, so that practically it is supported by its own roots as well as the additional roots of the stock. The plants should be well trodden in, and as soon as they commence to grow spread over the ground a good mulching of manure, which should be forked in during the summer. In the fall spread lightly among the plants a coating of loose litter or leaves, or even plough or hoe up the earth to the stems; the latter I have seen most effectually done; it preserves the lower branches and eyes from the frost, and in the spring can be drawn from them, and the ground forked over and mulched with manure as before.

PRUNING.—This should be done the second or third week in March or later, according to the weather. I have known the first week in April to be early enough. In pruning, first take out all the small or sickly-looking shoots, then prune the remainder from six to eighteen inches, according to their growth. On examining the roses in the spring, it will frequently be observed that many shoots have black blotches or rings on the last year's growth. In all such cases the shoots should be cut away below such spots, even if in so doing you have to prune to the plant itself. It is very difficult to give any fixed rules for pruning otherwise than according to their growth, but as a

general rule moderate-growing sorts should be pruned to about six inches, and strong-growing ones from twelve to eighteen inches. Let me note here that the whole pith of the subject of pruning and aftergrowth depends on the careful observance of the habits of each individual plant, also the object in view, as some prefer to keep their plants dwarf and bushy, and to do this they will necessarily have to be kept well pruned in; but others, such as have small gardens, and to such I more particularly address these remarks, should not prune too closely, but rather aim to make fine, tall bushes, as all village gardens are generally so surrounded by trees, fences, &c., that it is only when the bushes get a considerable height that they can obtain the necessary light and air.

This has been brought prominently to my notice during the last two years by observing the gardens of two of my neighbors, who have had some of the finest hybrid and moss roses that one could desire. They were planted three years since from two-inch pots, and this summer when in bloom were seven feet high and covered with a mass of flowers, a sight worth going a distance to see. They had been but slightly pruned each year, and had grown so tall that they were above the surrounding fences, and thus were enabled to get plenty of light and air, which no plant requires more than the rose.

It is estimated that since the appearance of the first hybrid perpetual roses, over one thousand varieties have been introduced to commerce. In making a selection from so numerous a list we naturally wish the best, and the question arises what are the qualities most to be desired. First, I would say a strong constitution, producing fine, robust foliage, with flowers of good substance, fine form, distinct colors, and, if possible, sweet-scented. Second, a disposition to bloom freely in the fall. This latter quality can be greatly enhanced by good cultivation.

I have made a selection of over sixty varieties that have come under my personal observation, but as I am aware that roses, like strawberries, succeed better in some localities than in others, I therefore placed myself in communication with Messrs. Ellwanger & Barry, of Rochester; John B. Moore & Son, of Concord, Mass., and Dingee & Conard, of Westgrove, Pa. I might here mention that I had an opportunity of submitting my list to Mr. Wintzer, who so ably represents the Dingee & Conard Company, and he fully indorsed all my varieties as succeeding well with them; therefore, for the sake of brevity, it will be understood that my list embraces that section of the country also.

SELECTION OF JOHN HENDERSON, FLUSHING, L. I.,
ALSO OF DINGEE & CONARD, WESTGROVE, PA.

Abel Carriere.
*Abel Grand.
*Alfred Colomb.
Anna Alexieff.
*Anna de Diesbach.
*Antoine Mouton.
Baron de Bonstettin.
*Baroness Rothschild.

*Baronne Prevost.
*Beauty of Waltham.
Boieldieu.
*Boule de Neige.
Captain Christy.
*Charles Lefebvre.
Comtesse de Serenye.
*Coquette des Blanches.

Countess of Oxford.
Dr. Andry.
Duke of Albany.
Duke of Edinburgh.
Edward Morren.
*Elise Boelle.
Elie Morel.
*Elizabeth Vigneron.
E. Y. Teas.
*Fisher Holmes.
François Michelin.
*General Jacqueminot.
*General Washington.
Hippolyte Jamain.
*Jean Liabaud.
John Hopper.
*Jules Margottin.
Julius Finger.
*La France.
Louis Van Houtte.
*Lyonnaise.
*Mabel Morrison.
Madame Charles Wood.
Madame de Cambaceres.

SELECTION OF ELLWANGER & BARRY, ROCHESTER.

*Alfred Colomb.
*Anna de Diesbach.
Baroness Rothschild.
Baron de Bonstettin.
Boieldieu.
*Charles Lefebvre.
*Climbing Jules Margottin.
Comtesse de Serenye.
Coquette des Alpes.
Countess of Oxford.
Edward Morren.
*Elise Boelle.
*Eugenie Verdier.
*Fisher Holmes.
*François Michelin.
*General Jacqueminot.

Madame Gabriel Luizet.
*Madame Victor Verdier.
*Mlle. Annie Wood.
*Mlle. Eugenie Verdier.
Magna Charta.
*Marguerite de St. Amand.
Marie Baumann.
Marquise de Castelane.
*Marquise de Mortemart.
Marshall P. Wilder.
Mary Bennett.
Maurice Bernardin.
*Merveille de Lyon.
Monsieur Boncenne.
*Paul Neyron.
Paul Verdier.
*Pierre Notting.
Pride of Reigate.
*Prince Camille de Rohan.
*Pride of Waltham.
*Queen of Queens.
Seneateur Vaise.
Ulrich Brunner.

*John Hopper.
*La France.
*La Reine.
Mabel Morrison.
Madame Gabriel Luizet.
*Marguerite de St. Amand.
*Marie Baumann.
*Marshall P. Wilder.
Maurice Bernardin.
Merveille de Lyon.
*Paul Neyron.
*Pierre Notting.
Prince Camille de Rohan.
*Rev. J. B. Camm.
*Victor Verdier.

SELECTION OF TWENTY-FIVE OF THE BEST VARIETIES DOING WELL IN BOSTON, BY JOHN B. MOORE & SON, CONCORD, MASS.

Abel Carriere.
Alfred Colomb.
Baron de Bonstettin.
Baroness Rothschild.
Charles Lefebvre.
Duke of Edinburgh.
Duke of Teck.
Duke of Wellington.
Etienne Levet.
Eugenie Verdier.
François Michelin.
Jean Liabaud.
John Hopper.

La Rosiere.
Louis Van Houtte.
Madame Eugenie Verdier.
Madame Gabriel Luizet.
Madame Marie Finger.
Madame Victor Verdier.
Marguerite de St. Amand.
Marquise de Castelane.
Monsieur E. Y. Teas.
Merveille de Lyon.
Thomas Mills.
White Baroness.

In addition to the above there is a growing class of roses

called "climbing hybrids;" these are not strictly climbers in the same sense as the Ayreshires, Bonsouls, &c., but should rather be called "Pillar Roses." They are strong, rampant sports from well-known hybrids, with flowers in every way identical with those of their parents, and will grow from ten to twelve feet high. This class should be encouraged either for small or large gardens. In the former case, from their height they could be more easily cleared of those pests of the rose, the aphides, red spider and caterpillars, by syringing with any of the different solutions for that purpose, as from their height the under part of the foliage can be well sprayed, and it is on the under part of the foliage that the principal trouble comes. Secondly, they can be made very effective in large gardens, either planted singly or in groups of three or more varieties, or in rows, thus forming a beautiful background for the dwarf-growing varieties. The following are well adapted for this purpose, but the observant rose-grower will find many other rampant-growing sorts that he can make use of for the same purpose:

Baronne Prevost.
Bessie Johnson.
Captain Christy.
Charles Lefebvre.

Countess of Oxford.
Duchess of Sutherland.
Duke of Edinburgh.
Edward Morren.

Glory of Cheshunt.
Glory of Waltham.
General Jacqueminot.
Eugenie Verdier.
Jules Margottin.

Madame de Cambaceres.
Maurice Bernardin.
Paul Verdier.
Princess Louise Victoria.
Red Dragon.

I might here mention that to insure getting these varieties it will be necessary to ask for the climbing varieties of these sorts as they are called in the catalogues.

Before closing this article, I would like to make a few remarks on rose-growing in general. The great lack of personal observation of the requirements of each particular rose, in regard to its cultivation, pruning, &c.; also want of attention and quickness in detecting caterpillars, mildew, &c., is the cause of failure. When the first leaf is discovered folded by a caterpillar, go for it, and then hunt over the whole lot continuously from that time. So, also, when the first speck of mildew is discovered, do not wait till to-morrow, but apply the remedy right away. Unsuccessful rose-growing is due to lack of attention to what at first is a little matter. When the leaves are eaten away like lacework, the bushes white with mildew, it is rather late to begin to apply remedies.

JOHN HENDERSON.

A SEPTEMBER DAYS OUTING.

FOR several years I had been longing to see the fringed gentian growing. I had seen pressed specimens and rather wilted bouquets of the flower at the horticultural fairs. Such views of a plant may satisfy an able botanist who, like Agassiz constructing a fish from a scale, can judge about all the characteristics of a plant from a few hints, but it cannot satisfy the amateur. He must see the unfamiliar specimen growing upon "its native heath."

I had been told that the gentian formerly grew in the lowland where the new rubber works are situated, but many patient seekings had not revealed it there, and a misty account of its being found somewhere near the adjoining town had reached my ears. The exact locality, however, was so indefinitely stated that I had no idea where to go; so I remained tantalized until a young lady friend said that she knew where there were whole meadows of it in L—, and offered to accompany me there. I set everything aside, and eagerly planned a fifteen-mile excursion after a flower.

As Saturday was the only time convenient for the young lady, we decided to take an early train upon that day. Just consider for a moment the many things to prevent a busy housekeeper from *tramping* upon Saturday! But there is nothing more true than "where there is a will there is a way," and by a little management nothing important was neglected, and, quite early in the day, luncheon, children, mother and friends were duly landed upon the station platform in L—. A long walk of two miles lay before us, but it was not tiresome to me, for I seemed to walk upon air, as at last I was going to pick the fringed gentian!

The meadows stretched away from either side of the road and we had to hunt quite a while before we found the flower, but when we did find it, it was abundant, and we filled our baskets with the heavenly blue blossoms. I say *heavenly* blue, for there appeared to be a peculiar depth to the color that I had never noticed in any other flower. It seemed something tangible, something apart from the flower, that we ought to feel by itself. Why has the gentian this indescribable deep blue? Its form and its fringed petals give it sufficient beauty. Does it blossom so very late in the season that it may absorb the blue from the skies all through the long summer days?

How strongly this flower suggests a long-tried, steadfast, charitable friend, with such a depth of character that every day she reveals new capabilities for loving and being loved!

If we had found nothing but the fringed gentian we would have felt more than rewarded for our journey, but growing with it was another specimen we had never seen, the Parnassus-flower, or grass of Parnassus, with greenish-white, prettily-veined petals. This plant suggested an entirely different character—a person with prettiness and other attractions, but not one whom we could call a friend, for false display or deceit mars her charms. The very name is deceiving. Parnassus-flower, named from Mt. Parnassus, growing in a bog! Then, when we came to analyze it, its pretty orange-tipped *real* stamens, as we supposed, proved to be false, the true stamens being less conspicuous.

We also found large quantities of the botrychium fern, with its pearly, grape-clustered sporangia. It is a species

described in the botanies as scarce, and very rare in this region.

Straying a short distance into a hillside grove, we came upon some queer, oven-like constructions in the brown needles and dead branches beneath the evergreen trees. We decided that they were nests of the oven-bird, as these mounds in the débris, with their round openings and tunnels, answered to Thoreau's description of these birds' nests.

Upon returning to take the cars for home, we learned we must wait a long time for a train, so while looking about we suddenly discovered, right behind the station, a spot of gentian blue; no mistaking that color.

Although we had all the spoils we could conveniently

carry, we darted out of the station quick as thought, and in a most ludicrous manner speedily clambered over a high board fence into the field.

A little boy, shouting with laughter, said: "Didn't she look just like the baby-elephant turning summer-sets!"

The *she* referred to the young lady, who was rather stout for such a trapeze-like performance.

Think of walking two miles for a flower, when here was quite a large plot of it beside the station. But we did not regret our walk, for it was repaid by our other discoveries. And this is not the first time that we have traveled far for a specimen, and then found it near at hand.

CORA E. PEASE.

AN AMATEUR'S PLAIN.

A RURAL contemporary recently published a plaintive letter from an amateur rosarian, who finds the names and habits of roses "confusion worse confounded." He complains that, as far as description by means of class name is concerned, the amateur can never be sure of what he is buying (nor can the professional, in some cases). He suggests the suppression of such indefinite terms as Noisette, Bourbon, and the like, and wants the family first separated into climbers and non-climbers, and then subdivided according to the time of flowering. He modestly admits that this latter classification would be somewhat difficult, owing to the erratic nature of the plant. But he says that hybrid perpetual is an exasperating misnomer, because it doesn't flower perpetually. I should think not; no one but Dr. Blimber would want the poor plant to blossom away all its energy twelve months of the year. Certainly, as this bewildered rosarian says, the plant in question is a hybrid, but not a perpetual flowerer. Remontant is certainly more applicable. Our best authority on the rose, Mr. Ellwanger, laments this irregularity of classification quite as much as our amateur friend, saying, however, that as much confusion has resulted from attempts to diminish as to increase the number of classes. I doubt whether matters would be greatly simplified by an attempt to make the names more fully descriptive. *Deutzia crenata flore pleno* is eminently descriptive, but it is not the sort of name amateur botanists would select from choice.

Perhaps sprightly F. Lance would be willing to head a movement for the reform of plant nomenclature; it is quite beyond my powers.

But the amateur I quote would sometimes be at a loss, even with his personal classifications into monthly, semi-monthly, and occasional bloomers. You cannot depend on roses, as florists know to their cost; they are as uncertain as fishermen's luck. You can only cling to Mr. Ellwanger as a guide, philosopher and friend, and then let things slide with exemplary philosophy. Amateur growers do not find mystifications in names among roses only. Unless brought up among plants, familiar

with local, generic and specific names, even the professional is occasionally mystified by some unfamiliar name which disguises an old friend. I need not mention the dear old ladies who *will* call chrysanthemums "artimishals," in spite of protests from the grower. This is, doubtless, a corruption of artemisia, though I have seen it referred to as a misuse of "after Michaelmas," in allusion to their time of flowering. I once heard an aster called a "Mitchell's daisy," a barbarous form of Michaelmas daisy, I imagine. But the offenders in the matter of "artimishal" are not always uneducated persons by any means; positively, they appear to use the term from inherent perversity.

Again, there are the localisms. It is rather hard on a conscientious florist when some dear old lady, radiating benevolence and love for plants from her bonnet to her boots, comes asking for some beautiful plant possessing an eccentrically descriptive name. For example, what upon this earthly ball is a "fish-geranium" and what is a "nutmeg-geranium?" I know a nutmeg-melon when I meet it, and I can cheerfully give a few points on fish, but how came the two in combination with the geranium?

I know lemon or spice geranium and ivy-geranium and have no difficulty in recognizing my old friend the pelargonium as a Lady Washington. This last synonym always seems rather absurd, since the original Lady Washington pelargonium is scarcely in cultivation now; one might just as well call, indiscriminately, all pears Bartletts.

Then there are camellias, which people *will* call japonicas, from the specific name. This really would not be out of the way, only people not deeply versed in botany are very apt to consider camellias and japonicas two distinct flowers.

By the way, why is it that people who understand little of plant names are often ashamed to frankly say so? It is not by any means a sign of ignorance. One cannot expect to know the tricks and manners of plants without life-long study, and the recollection of botanical names is trying even to a good memory unaccustomed to such

work. The study of plants needs to be as careful and painstaking as the study of ethnology or any other long-drawn ology, yet I have seen a person look confused and embarrassed at being discovered in some little botanical ignorance. Horticulture is a science and an occult one to many; just think what a solid mass of profound wisdom and research was gathered together at the Philadelphia convention in the persons of the many delegates.

Returning to plant names, occasionally the amateurs can turn the tables on professionals by complaining that florists' names are not all that they should be. We cannot altogether defend the gardenia under the name of 'Cape jasmine, when it is not, strictly speaking, a jasmine, and does not come from the Cape. It is hard to tell how this misnomer was first given to the plant. But at one time gardeners had a playful habit of tacking the adjective "Cape" on most new plants, irrespective of their habitats.

Of late my botanical mind has been somewhat puzzled by what appears to be confusion in names. An old-fashioned herbaceous border has among its many charming denizens two plants precisely similar in form, habit and foliage. The only difference is in color. The one is bright orange, with a dash of crimson in the centre; the other is deep crimson, with orange on the under side of the petals. One of these is *Coreopsis Drummondii*, the other *Calliopsis Drummondii*. It seems impossible that they can be anything but species of the same genus; why, then, this difference in generic name? It is rather perplexing to a student who wants to get at the reason of things.

"Strange such a difference should be
"Twixt tweedledum and tweedledee."

The perplexed rosarian who gave me my opening text

might truly take exception to old-fashioned plant names, for they certainly are not descriptive. You might evolve from your inner consciousness your own idea of a wandering Jew, with the assistance of Eugene Sue, but you could never guess from that the appearance of the plant which bears this popular name. And suppose, without seeing the plant, you were required to give your impression of sweet William? Then there is London pride, or none-so-pretty, which is painfully non-descriptive of the dainty little saxifrage, but I love the name, for it brings recollections of far-off Derbyshire and a once familiar rocky bank covered with these graceful flowers. How many of us have some such recollection of an old-fashioned plant; it may be of clove pinks or sweet peas, or even of the aggressive and democratic sunflower. A revised edition of botanical nomenclature would clear away some confusion, perhaps, but it would not be popular.

Some of the botanical publications are very sensibly taking the plan of giving only the plain, unvarnished English names of plants; often convenient to florists as well as amateurs.

But here the confusion we lament steps in; there are so many different names for the same plant, whereas when the scientific name is given no mistake can be made, and it has also the advantage of being alike in all languages.

I started with an amateur's plaint on the subject of roses and find I have drifted through space, like one of Julian Hawthorne's book reviews. Abstractly, the matter is easily settled. Plant names need some revision, but it would be a very large matter to undertake.

The best plan is for every florist and grower to be personally accurate and let the rest of the matter take care of itself.

E. L. TAPLIN.

CONVENTION ECHOES.

WHEN the Society of American Florists arranged to meet in Philadelphia, the members felt in their inmost hearts that they would be received with that brotherly love for which the city is famous. They knew that the Philadelphia florists stick closer than a brother to fellow-craftsmen, yet they were not altogether prepared for the avalanche of welcome showered upon them. Of course they accomplished the business laid out, and disseminated an ocean of botanical knowledge of the most serviceable quality.

Horticultural Hall, the place of meeting, was very nicely arranged, business being transacted in the upper hall, while the exhibition was held below. The balconies were draped with laurel, and the stage handsomely decorated with plants and flowers.

The exhibition, though not very large, presented many attractive features. The collection of aquatic plants was much admired, one beautiful feature being the sacred lotus (*Nelumbium speciosum*). The exquisite rosy blossoms, stately leaves and oft-sculptured seeds were the admired of all beholders. Another tank contained

nymphæas, pink, white and blue, with a fragrance sweeter than the uses of adversity. The display of gloxinias and tuberous-rooted begonias was very good, making a brilliant patch of color among flowers of more Quakerish hue. White lilacs added their fragrance to the air, and tempered the severity of adjoining cacti. Cruel-looking monsters were these, for the most part, though fine representatives of their class; they presented a *chevaux-de-frise* of grinning spines, here and there relieved by the venerable old-man cactus, the Pickwick of its race.

Of course there were ferns; ferns with all the fairy-like suggestiveness of their tribe, flanked by a noble cohort of flaming gladioli.

There was a new rose on exhibition, but this goes without saying; a floricultural convention without a novelty in the queen of flowers would indeed be a desert waste. The novelty in this case was a seedling claiming Mabel Morrison and *Devoniensis* as its parents; it is a charming white, with very handsome foliage.

Victoria Regia was represented by its noble leaves, tremendous shields of green with a reverse of warm

maroon, the cable-like stems thick-set with cruel thorns.

Some blooming plants of *Billbergia rosea* attracted notice by their odd beauty. The greenish-white, strap-shaped leaves, stiffly recurved, like most bromeliads, supported a large scape of rosy flowers.

The exhibit of baskets, bulbs and florists' appliances was full and complete, though we should not recommend to any self-respecting florist the use of dyed pampas plumes, showing every aniline shade calculated to grate upon an artist's sensibilities.

On the opening day, after a speech by Mr. Mitchell, of the Pennsylvania Horticultural Society, and an address of welcome by the Mayor of Philadelphia, Mr. Henderson read his essay, published in this issue. This was followed by some bright impromptu speeches from his contemporaries. Mr. Saunders, of Chicago, caused much amusement by his description of a post-mortem examination held on a bouquet built by a city florist some thirty years ago. Like a modern belle, it was fearfully and wonderfully made, and was a profound mystery to the uninitiated.

The afternoon and evening sessions were occupied by the reading of essays, according to programme, followed by discussions on the subjects presented. Subjects drawn hap-hazard from the "Question Box" were cleverly debated. Among others a lively discussion was held on the great plant auctions, which are said, with a good deal of reason, to greatly cripple the local trade of small florists.

On Thursday, the 19th, all business was shelved in favor of an excursion to Atlantic City, where a fine dinner at the United States Hotel was given to the visitors by the Florists' Club, of Philadelphia. Some of the busy spirits proposed an evening session on their return, but the motion was ineffectual. On Friday morning the attendance was much larger than at the previous meetings. The first business in order was the election of officers for the ensuing year. These were elected unanimously: Robert Craig, Philadelphia, president; Edwin Lonsdale, Philadelphia, secretary; Myron A. Hunt, Chicago, treasurer; J. C. Vaughan, Chicago, first vice-president. J. M. Jordan, of St. Louis, presided. Chicago was chosen as the next meeting-place. While waiting for Mr. Le Moul't's exhibition of designs, next on the programme, Mr. Jordan caused much laughter by a witty speech, eulogizing Chicago, the hated rival of his own city. He aroused much enthusiasm by alluding to the home of Anarchists as "a peaceful, law-abiding community, with beautiful surroundings and enlightened inhabitants."

Mr. Le Moul't's exhibition was of much interest, though the making of designs upon the stage, intelligible enough to professionals, would not in reality give much information to those unacquainted with the process. Accompanied by Mr. Le Moul't's amusing explanations the exhibition provoked much laughter and enthusiasm. After a little by-play the employees, male and female, were set at work constructing a large "Wheel of Fortune." While this was going on, various designs in immortelles were shown. Among them was a full-sized

Shetland pony, on which a small jockey was placed—the jockey was alive. This noble steed was christened "Barnum's woolly horse" by the irreverent audience. A good model of the steamer *Amerique*, the yacht *Galatea*, and a Venetian gondola followed. Then came the British lion, stuffed with straw. He was a well-proportioned beast, only his tail appeared to have that twist O'Donovan Rossa so often threatens. Mr. Le Moul't explained that this animal was intended as an allegorical representation of our friend Mr. Thorpe, justly regarded as the lion of the occasion, an announcement received with much applause. Then appeared (in immortelles) that zodiacal emblem usually associated with the seductions of bock beer, *capricornus en rampant*, as the Heralds' College would say. When Mr. Thorpe came to the front, bearing this emblem, there was a temporary cyclone that seemed to threaten the stability of Horticultural Hall.

The winged "Wheel of Fortune," which occupied one hour and twenty minutes in the making, was next exhibited. It supported a cornucopia and stood on a handsome base of tropical leaves and flowers. In the afternoon it was presented to Mr. George W. Childs, on the occasion of the society's visit to Wootton, his beautiful country seat at Bryn Mawr.

The evening session was occupied in discussions on steam versus hot water, resulting in an overwhelming decision in favor of steam, with some information on the subject of flues.

A committee to organize the Hail Insurance Company was appointed as follows: J. M. Jordan, St. Louis; H. A. Siebrecht, New York; E. G. Hill, Richmond, Ind.; J. G. Esler, New Jersey, and J. C. Vaughan, Chicago. The convention finally adjourned, in a somewhat unceremonious manner, on Saturday morning, mutually pleased with each other and with the work accomplished.

The ladies' reception committee, composed of Mrs. G. C. Evans, Mrs. Mary Bissett Rumel, Mrs. Robert Craig and Miss Fergusson, did everything to make the convention a red-letter period to the feminine visitors. They piloted their charges through the alluring Wanamaker's, the Union League Club, the Masonic Temple and Girard College, and after making them happy at Atlantic City, and still happier at Wootton, they gave a final drive through Fairmount Park and up the romantic Wissahickon, varied by visits to the Zoo, Memorial Hall and Horticultural Hall, with a charming dinner at the quaint Belmont Mansion, where, after some bright speeches, the suggestion of three cheers for the ladies of Philadelphia literally brought down the house. Mr. Childs' hospitality was, like every impulse of his great heart, generosity itself, and every one of his thousand and odd floricultural guests will ever carry a warm remembrance of his gracious courtesy and modest kindliness; and wherever florists congregate, from Maine to California, they will carry deep in their hearts the unwavering conviction that the City of Brotherly Love, like someone we all know, is ever first in peace, first in war and first in the hearts of her countrymen.

E. L. TAPLIN.

THE LOST GARDEN.

THERE was a fair green garden sloping
From the southeast side of a mountain ledge,
And the earliest tints of the dawn came groping
Down through its paths from the day's dim edge.
The bluest skies and the reddest roses
Arched and varied its velvet sod,
And the glad birds sang as the soul supposes
The angels sing on the hills of God.

I wandered there when my veins seemed bursting
With life's rare rapture and keen delight ;
And yet in my heart was a constant thirsting
For something over the mountain height.
I wanted to stand in the blaze of splendor
That turned to crimson the peaks of snow ;
And the winds from the west all breathed a story
Of realms and regions I longed to know.

I saw on the garden's south side growing
The brightest blossoms that breathe of June ;
I saw on the east how the sun was glowing
And the gold air shook with a wild bird's tune.
I heard the drip of a silver fountain,
And the pulse of a young laugh throbbed with glee,
But still I looked out over the mountain
Where unnamed wonders awaited me.

I came at last to the western gateway
That led to the path I longed to climb,
But a shadow fell on my spirit straightway
For close at my side stood graybeard Time.
I paused with feet that were fain to linger
Hard by that garden's golden gate ;
But Time spoke, pointing with one stern finger,
" Pass on ! " he said, " for the day grows late."

And now, on the chill gray cliffs I wander,
The heights recede which I thought to find,
And the light seems dim on the mountain yonder
When I think of the garden I left behind.
Should I stand at last in its summit's splendor,
I know full well it would not repay
For the fair lost tints of the dawns so tender
That crept up over the edge o' day.

I would go back, but the ways are winding—
If ways there are to that land in sooth.
For what man ever succeeds in finding
A path to the garden of his lost youth ?
But I think sometimes when the June stars glisten
That a rose-scent drifts from far away,
And I know when I lean from the cliffs and listen
That a young laugh breaks on the air-like spray.

—Selected.

OLD-FASHIONED GARDENING.

SOME two hundred and fifty years ago, when Charles I. was reigning in England, about the time when the Pilgrim Fathers were laying out their first gardens on the wild slopes of Plymouth, there was a folio published in London and dedicated with the following title to the Queen, Henrietta Maria :

"Paridisi in Sole. Paradisus Terrestris. A garden of all sorts of pleasant flowers which our English ayre will permitt to be noursed up : with a kitchen garden of all manner of herbs, raves and frutes, for meate or sause, used with us, and an Orchard of all sorte of fruit-bearing Trees and Shrubbes fit for our Land, together with the right orderinge, planting and preserving of them, with their uses and vertues. Collected by John Parkinson, Apothecary, of London, 1629."

That part of the title-page which is not covered by this comprehensive title is occupied by a quaint representation of the Garden of Eden. In the centre of the plate the tree of knowledge lifts up its head, the fruit still unplucked by our first parents. Adam is seen busily employed setting scions in an apple-tree ; the mother of all living, happy in her primeval simplicity of dress, is complacently sucking a big pine-apple, while in the foreground all sorts of flowers are growing in marvelous pro-

portions. There is a tulip as large as a peck measure and a cyclamen towering to the height of a man.

Despite the quaint, almost ludicrous, character of the title and of the illustrations, the book is well worth reading, if only to get an idea of gardening in our great-grandmothers' time. In these days a garden is an artificial production, with which nature has as much to do as with the weaving of a Turkish carpet. But it was not so in the gardens of the old time. There was the stamp of character and all the charms of a surprise in the distinctive peculiarities of our old-fashioned walled gardens. One was famous for its orchards of peaches and plums, its hoary old apple-trees, its grass alleys and the wealth and variety of its pot-herbs. In another was a row of straw bee-hives, the bees humming all the summer days over beds of sweet-peas, mignonettes and lilies of the valley. All these old pictures came back to us as we read Parkinson's book, and we almost felt constrained to grieve that such gardens as he describes must be numbered among the things of the past.

The author begins by giving good practical directions as to the site of the garden and its soil, and furnishes the reader with geometrical designs for the beds and advice as to the relative merits of border-

ings in tiles, lead, thrift and box. Subsequently he goes on to say:

"To furnish the inward parts and beds with those fine Flowers that (being strangers unto us and giving the beauty and bravery of their colours so early before many of our owne bred flowers, the most to entice us to their delight) are most beseeeming it: and namely with Daffodils, Fritillaries, Jacinthes, Saffron-flowers, Lillies, Flower-de-luces, Tulipas, Anemone, French Cowslip or Beareseares and a number of such other flowers, very beautiful, delightfull and pleasant, whereof although many have little sweete sent to commend them, yet their earlinesse and exceeding great beautie and varietie doth so farre counterwaile that defect, that they are almost in all places with all persons, especially with the better sort of the Gentry of the Land, as greatly desired and accepted as any others the most choicest, and the rather, for that the most part of these Outlandish flowers doe show forth their beautie and colours so early in the yeare that they seem to make a Garden of delight even in the Winter time, and doe so give their flowers one after another that all their bravery is not spent until that Gilliflowers, the pride of English Gardens, do shew themselves."

Our writer appears to have a pretty good knowledge of the different varieties of flowers, and does not hesitate to tell what he knows. He states that there are a hundred sorts of daffodils, and inveighs forcibly against the "many idle and ignorant Gardiners and others who get names by stealth, as they doe many other things, and doe call some of these Daffodils, Narcisses, when as all knowe that knowe any Latine, that Narcisses is the Latine name and Daffodil the English of one and the same thing, and therefore alone without any other Epithite cannot distinguish several things. I would willingly, therefore, that all would grow judicious and call everything by his proper English name in speaking English, or else by such Latine name as everything hath that hath not a proper English name, that thereby they may distinguish the several varieties of things and not confound them."

The tulip^{man}ia was raging at this time, and he boldly declares that "there is no Lady or Gentlewoman of any worth that is not caught with this delight or not delighted with these flowers." He praises the anemones as being "so full of variety and so dainty, so pleasant and so delightsome flowers, that the sight of them doth enforce an earnest longing desire in the mind of anyone to be a possessour of some of them at the leaste. For, without all doubt, this one kind of flower, so variable in colours, so differing in form (being almost as many sortes of them double as single), so plentifull in bearing flowers, and so durable in lasting, and also so easie both to preserve and to encrease, is of itself alone almost sufficient to furnish a garden with flowers for almost half the yeare."

Parkinson has a strong love for the commoner, old-fashioned flowers which linger in but few instances in our country gardens. He commends double poppies, "flowers of a great and goodly proportion;" double daisies, "which are common enough in every garden;" French marigolds, with "their strong, heady sent, and glorious show for colour," sweet Williams, sweet Johns,

hollyhocks and double and single pæonies. He declares carnations and gilliflowers to be "the Queene of delight and of flowers," and enumerates more than a dozen varieties by names which are probably no longer known to florists.

The rose family appears to have passed through many modifications since Parkinson's time, and probably has been more affected by culture during the last two hundred years than any other flower in our gardens. Most of those described by our author were of the single variety, and seem to have belonged to our damask and brier roses. Even the cabbage and moss roses, which we consider old-fashioned, find no place in his list.

Parkinson is shrewd enough to deny that single flowers cannot be changed into double "by the observation of the change of the Moone, the constellations or conjunctions of Planets or some other Starres or celestial bodies," but he even holds that no such transformation could be effected by the art of man. He says:

"If it shall be demanded, from whence, then, came these double flowers that we have, if they were not so made by art, I answer that assuredly all such flowers did first grow wild, and were so found double as they doe now grow in Gardens, but for how long before they were found they became double no man can tell; we onely have them as nature has produced them, and so they remaine."

In describing his garden flowers in detail he gives a list in many cases of more varieties than are to be found in our modern gardens, and also under names by which they are not now known. For instance, he terms the snowdrop "a bulbous violet." He calls the iris "flower de luce," and from an illustration that he gives of the "greate Turkie Flower de luce," it is seen to be a much larger and handsomer flower than the blue flags we cultivate to-day.

Under the head of "Vertues," which follows the description of each plant, we run across some curious statements. As a licensed apothecary, Parkinson speaks with a certain lofty incredulity of "the physicall vertues" ascribed to many plants, but he does not always disdain an old-wives' recipe; as, for instance, when speaking of "the Lilly Convally" (lily of the valley):

"The flowers of the white kinde are often used with those things that help to strengthen the memory and to procure ease to Apoplectick persons. Camerarius setteth downe the manner of making an oyle of the flowers which he saith is very effectuall to ease the pains of the Goute and such like diseases, to be used outwardly, which is thus: Having filled a glasse with the flowers, and being well stopped, set it for a moneth's space in an Ants hill, and after being dreigned clear set it by to use."

Not a few drugs considered of great value at present he excludes arbitrarily from his pharmacopœia, digitalis for one thing, which he asserts "not to be used in Physicke by any judicious man that I know." Of hellebore, also, he says that "it is not carelessly to be used without extreme danger; yet in contumacious and stubborn diseases it may be used with good caution and advice." He declares "all the sorts of Beareseares (auricula) to be Cephalicall, that is, conducing help for the paines in the head, and for the giddiness thereof, which may happen eyther

by the sight of steepe places, subject to danger, or otherwise." He stands up manfully against some of the popular superstitions, and is not afraid to give his own position. About the mandrake we find this:

"The roote is sometimes divided into two branches a little below the head, and sometimes into three or more, as nature listeth to bestow upon it, as myselfe have often seene, by transplanting of many, as also by breaking and cutting off of many parts of the roote, but never found harme by so doing, as many idle tales have been sette down in writing and delivered also by report, of much danger to happen to such as shall digge them up or breake them; neyther have I ever seene any forme of man-like or woman-like partes in the rootes of any; but, as I said, it has oftentimes two maine rootes running downe right into the ground, and sometimes three and sometimes but one, as it likewise often happeneth to Parsneps, Carrots and the like. But many cunning counterfeite rootes have been shaped to such forms and publicly exposed to the view of all that would see them, and have been tolerated by the chief magistrates of the Citie, notwithstanding that they have been informed that such practices were meere deceit and unsufferable. Whether this happened through their own credulity of the thing, or of the persons, or through an opinion that

the information of the truth rose upon envy, I know not. I leave that to the Searcher of all hearts."

We cannot linger longer among the pages of this curious book, though the author calls up pleasant and refreshing pictures of sunny gardens and laughing orchards, such as the gossipy Pepys, his contemporary, might have revelled in. To step into such a "garden of delight" as old Parkinson described would almost be like going back to the old days when the maids of honor of Charles II.'s court flirted and romped with the showy gallants among the shades of Whitehall. The brilliant piece of mosaic work called a flower-garden in these days is as little like those of the old time as the trim-figured belles of the modern drawing-room are like the loosely-clad, negligent, ease-loving dames of the merry monarch's time. The many who love flowers for their own sake, and take pleasure in gardening as an occupation involving the expenditure of time and loving care, rather than of money, can easily have a garden if they will, where by skillful culture and grouping they can enhance the luxuriance, the beauty, the infinite variety of form and color which are found in nature. We laugh at the old and the antique, but in flower-gardening the antique and the ancient are the most worthy to be copied.

F. M. COLBY.

RAISING CHRYSANTHEMUMS.

(CONCLUDED.)

ALTHOUGH Artemisia was interested and helpful in Agricola's experiments, she had a little chrysanthemum plantation herself, where the plants were allowed to grow very much as they pleased—she did very little training or disbudding. "I'd rather have a hundred flowers as large as dollars," said she, "than one as large as a cabbage. I want them to wear in my hair, and at my throat—and those great overgrown things of yours are not fit for either bouquets or breast-knots. Besides, I want ever so many of them to give away to the neighbors, who are too lazy to cultivate them, or too stingy to buy them."

"I don't think those persons deserve encouragement," said Agricola, struggling with a splendid *La Rayonnante*, which he was transferring from the open ground to a large flower-pot. "At all events, they don't need it, as their numbers never grow less."

All summer, Artemisia's uneducated way of growing chrysanthemums had been a great trial to her masculine co-worker. It was continually, "Hadh't you better put them farther apart?" or "Hadh't you better cut them back?" or "Do you think they ought to carry all those flower-buds?" or "It seems to me I wouldn't have those kaiser-blooms and coreopsis among 'em;" or "You'd better encourage your plants with a little sulphate, Artemisia." But she had said, "Now, just let me have my poor little patch as I want. You have taken your choice of plants, and I have there only those that you don't care for or have put aside as old-fashioned, although I think there are some of the best ones among them. But if I want my plants to grow up naturally, without being

strait-laced and tied up and spread out and pinched back, do let me! I don't want exhibition plants, and when I desire flowers as large as soup-plates, I plant sun-flowers. Look at your Fair Margaret over there! You drove all its energies into one stupendous flower, and then the caterpillars spoiled it in one black night! Then your Guernsey lost its glory in the last thunder-gust. And every time Mrs. Feeble's long-gear'd servant-girl takes a turn over here after the hens, more or less of your beauties fall a sacrifice to her switching skirts. If——"

"It seems to me," interrupted Agricola, digging away at a resplendent *Source d'Or*, "that your interview with Mrs. Feeble had very little effect on her hens. I told you 'twould be useless."

"You told me it would make her angry, and I really hoped it would. I have been angry about her hens all summer, and it's time she took her turn. She says the hens are an invention of her husband's to keep the boys at home. Why is it, I wonder, that boys must always be enticed, bribed and cajoled into staying at home? Why don't they stay at home because it's the place to stay, and because they're told to stay, as girls do?"

Agricola, noticing that he was covering himself with red clay as with a garment, proceeded to tie his gardening-apron around what would have been his waist if he had been a woman, straightened himself a moment to rest his spinal muscles, and replied: "Well, the Feebles, father and sons, seem to regard home as a place simply to board and lodge in. He keeps his family in cheap retirement in the country, while he himself lives in the gay

metropolis, only staying at home from Saturday night till Monday morning, and his boys follow his example as far as they can. Depend upon it, Artemisia, it all comes from a blunting of the moral sensibilities, caused by keeping hens. But you were speaking of your chrysanthemums."

"I was only going to say that if one of my flowers is broken there are still dozens of the same kind left. And as for weeds in my bed, if I want weeds do let me have them. They're cheap and plenty. But I notice that you dub as a 'weed' everything that is really willing to grow. Just as soon as my precious, old-fashioned damask rose, that I tugged all the way from Penobscot County, really began to send up strong shoots from its underground stems and look thrifty, you said, 'Why, it's actually a weed, after all!' Your chief pleasure in plants seems to be in making them grow when they are not quite willing, and as soon as they really begin to feel like it you head them in and pinch them back, and nip them here and prune them there, until they are driven out of their wits. Look at that Mikado—it actually has an insane, disheveled look, and no wonder—working a whole year to produce two great tangled flowers! And I don't want to see you surreptitiously weeding my bed again, as I did yesterday. You have more purslane, and plantain, and shepherd's-sprouts in your bed, out there by the bean-poles, than there are in my whole territory. Charity begins at home; before casting the coreopsis and bachelors'-buttons out of your neighbor's garden cast the pig-weeds and Roman wormwood out of your own."

"Your apology is sufficient," said unperturbed Agricola; "and now, as it looks like frost to-night, will you provide some pins and help me? Every one of these beauties must be capped with a newspaper to-night or they will be scorched by the cold."

"What a job!" groaned Artemisia, as she took an armful from her stack of old *Advertisers* in the attic and tugged them down two flights of stairs and then went back one flight after a paper of pins. "I do declare, Agricola," said she, meeting that gentleman in the kitchen, where she stopped to wind an old shawl round her neuralgic head and put on her rubbers, "I do believe that you, small man that you are, will accomplish one thing that neither riches, nor poverty, nor principalities, nor powers, nor bankruptcy and the poorhouse would ever have been able to achieve!"

"What's that? raising a sky-blue chrysanthemum?" inquired the party addressed, helping himself to papers.

"No!" popped Artemisia, with uncommon emphasis, "tiring me out of all patience with flowers and making me wish about the raising of 'em as our old English friend did about the playing of difficult music—that what is difficult were quite impossible," and she vanished down the back door-steps into the chill darkness.

Up and down the rows they went, pinning the papers carefully about the budding plants, until the latter loomed like processions of goblins in the semi-darkness. There was a plantation of them near the street fence, another near the back fence, a third by the big pear-tree, and a fourth over toward the Feebles—besides numerous detached plants in the mixed flower-beds. "If it starts

to blow to-night," remarked Artemisia, shivering in the damp air, "these papers will be down by the post-office in the morning."

"If it blows there will be no frost," contentedly remarked Agricola. He did not shiver, being, like all his delicate sex, more warmly dressed when in his ordinary in-door costume than women are when they have on their thickest out-of-door wraps.

"But you remember one fall when, before there had been a touch of frost, there came a night of bitter, freezing wind that froze our half-blossomed plants as brittle as pipe-stems?" said Artemisia, trying to scrape some of the red mud off her feet at the door. "There, they're all protected now—and in the morning I shall have to come out in the wet grass and mud and take every cap off again!"

The next morning, after Agricola had gone to his business, Artemisia went over the same ground again, removed the papers, smoothed and folded them, and took out the pins for use the next night—a good hour's work, although she had plenty to do in the house. And the evening and the morning were spent in the same way for a week or more. Then she rebelled.

"I really cannot spend every evening out in this raw, malarial air," she said, one night, as she warmed her chilled hands, after the usual garden exercise; "I have neuralgia in both sides of my face already and a pain like a knife under my shoulder. Everybody says the night air here is specially unwholesome; that ominous blue mist that creeps up from the clay flats just penetrates to one's very bones. There must be some more wholesale sort of protection invented—a tariff, for instance—though I hope my share of the duties won't be any heavier," said she, putting her damp shoes under the stove to dry.

"I'm going to build a house for them," mused Agricola—"a sort of shelter-tent—a frame of small timbers, covered with sheeting; then I'll pack all the most precious plants close together under that, and they will be safe until really cold weather."

But Fate objected. First, the man who promised the timber failed to come to time. Then the man who promised to do the framing did likewise. After a while, when Agricola had assured himself that the timber was actually ready for transportation to his garden, he made a third journey to the village, a mile away, caught and secured the carpenter, and returned home in triumph—to find that the faithless timber man had basely sold the timber in the meanwhile to the troublesome individual popularly known and justly execrated as Another.

More delay, more journeys to the village, more nights of work and worry over the plants, followed in consequence. Three or four times a night did Artemisia's head pop out at the chamber-window, keeping watch of the weather and the temperature. "If they should get nipped, after ten months of work and bother," said she to the whole outside world, "how vexatious it would be! I do wonder if I ever shall have a night's untroubled rest again?" she would murmur, going back to her anxious pillow, to try for a little nap before getting up at six o'clock—to ask, as she hurried downstairs—"Was there a frost? Are they frozen? Did they escape after all?"

By and by the vicious imp who delights in thwarting all innocent and harmless plans found some other good soul to worry, and so, for a little, left Agricola in peace, and presently he saw the desire of his eyes—the slender skeleton which looked, Artemisia said, like the ghost of a young house-frame—was in its place; the plants, in all stages of bud and part-bloom, were set in solid ranks in the earth floor, with two or three narrow paths between (one of the plants, a beautiful Madame Audiguier, being so tall that a hole like a post-hole had to be dug for it, and the poor thing set nearly knee-deep in the earth, in order to it get into the house at all and after all it stood seven feet high)—and now all was ready for the unbleached-muslin covering.

Artemisia was full of delight at the shelter-tent.

"My willing soul would stay
In such a frame as this,"

sang she, beholding at hand the end of her evening out-of-door work. "Look here, Agricola, you'd better contract with the Wamsutta people to take all the sheeting they can spare. No ordinary retail dealer will have enough to cover this territory."

A big bundle of unbleached cotton cloth, so big that it had to be brought from the station in a cart, arrived next day. Artemisia was busily preparing for three or four expected guests of Agricola's own inviting, utter strangers to her, and had dinner to prepare for Agricola's two workmen, besides all her ordinary work, when that reasonable person appeared at the kitchen door with—

"Well, Artemisia, I suppose you're ready to sew this for me?"

"Sew that to-day? with all the rest of the work you have laid out for me to do? Why there are fifty yards of sewing to be done on that canopy! It would take me a whole day, if I had not another thing else to do! I suggest that you take it immediately down to Miss Seamer, who is ready to sew and wants the money for it. Take it down yourself and then you can tell her exactly how you want it," added grave Artemisia, with a vivid recollection of the times she had tried to suit him "exactly," and failed. "Now, tell her precisely how long the breadths must be, tell her to sew them together into one piece and then hem the two ends," said she, knowing just what was necessary.

"Don't you worry about my explanation," said he, preparing to start. "No danger but I shall make it clear to her."

But when toward night a workman was dispatched for the covering, it appeared that Agricola and Miss Seamer had not made it very clear between them. The cotton was simply cut into lengths and the lengths hemmed at the ends, making half a dozen Brobdignagian towels.

"Now, good gracious!" said Agricola, who did not often swear, "I thought that woman understood me—she said she would do it exactly as I said, and—"

"I've no doubt she did just as you told her," said Artemisia, with a twinkle. "I've always found her correct in all the work she has done for me. But you'll hardly dare fret at *her*, because—because she works for *money*."

Men don't often complain at what they have to pay for," said she, half to herself—"it's the service that is performed gratuitously that they grumble at."

"Well, you can sew these seams, at any rate," began Agricola, bravely, "now all the ends are hemmed?"

"Indeed, no," answered she. "It is now near night, and I have not sat down since my hurried half-breakfast. Take the work right back to Miss Seamer," said she, sweetly, "she is ready to do it, and wants the pay for it."

When it came back next time, it was found that after all Agricola's careful measurements he had planned the roof-covering eight or ten inches too short. Then no arrangement whatever had been made for the gables; and then the cloth for the sidings fell short several yards. So the precious plants had to spend another night under the roofless house, but, fortunately, the night was not severe. It was vain for Artemisia to suggest Miss Seamer the third time; she was obliged to sit down herself and sew her left thumb-nail through in making the covering for the gables and piecing the walls.

"At last," said she, rising when the last stitch was done, holding her hand hard against her aching side—"at last it's finished, and now I hope I shall have one night's sleep undisturbed by worry about those dratted chrysanthemums!"

Agricola looked up in horror. "I never expected to hear you swear like that, Artemisia," said he, in a pained voice.

"Well, I never expected to do it, either," said unrepentant Artemisia, "but you never can tell what you'll be driven to. Since I've been in the valley of the shadow of chrysanthemums I've done many a thing that I never expected to. Happy Jane! If she had but known it, 'the valley of the shadow of Frederick the Great' was nothing to 'em! And now, for mercy's sake, let's get this thing on before dark!"

"Can't do it," said Agricola, coolly—"am too tired; and, besides, I haven't any tacks. Forgot 'em."

"Tacks!" exclaimed the baffled woman, dropping back in her chair again—"there's plenty of tax on my patience, if that's all! *Have* I got to fidget over those—I won't say 'dratted' again, but I do wish there were a pirate somewhere about to swear at them for me)—those *things* another live-long night?"

"Guess they won't freeze," said Agricola, putting on his slippers comfortably; "at any rate, I'm too tired to stir out again to-night."

"It looks like rain," said provident Artemisia, returning from a trip of observation.

"Well, a little rain won't hurt 'em," said Agricola, "and if it rains, there will be no frost."

"But if it rains, it will be a long storm—one of the fall equinoctials," said experienced Artemisia, "and how can we cover that frame in the rain?"

Sure enough, in the night it did rain; and in the morning it continued to rain, and gave promise of continuing to rain, and to terminate in continuing to rain. "It's no use," said Agricola, whose religion it was to put off everything until just too late; "this downpour will shatter every flower of 'em. We must put on that cover."

Artemisia stood aghast. "After all these three weeks of golden weather," said she, "to go out in this storm to do what might as well have been done in sunshine!"

She drew on her rubbers, enveloped herself in a waterproof, wound her head up in a shawl, and plunged into the flood. The rain streamed down her cloak and ran into her shoes; as she raised her face to look up at the roof she was intent on covering, a sudden gust sent an additional shower from the boughs of the pear-tree, and the big drops splashed in her eyes, and ran into her ears, and down the back of her neck; and as she lifted her arms to pull the refractory sheeting, which clung to the wet timbers in the most vexatious way, streams of water ran up her sleeves and sopped her clothing through and through. Instead of adopting the plan of throwing the covering over the ridge-pole at one end, and then each walking along by the low eaves and drawing the roof-cloth smoothly along the whole length of the roof, as Artemisia had suggested, Agricola, who was born wise, began at the side, which necessitated drawing nearly the whole weight of the cloth up-hill over the wet frame, and then climbing an inverted box to lift the remaining half over the ridge-pole. After pulling and tugging vainly to get it smooth, Artemisia procured a long stick, went inside the tent, and by dint of prodding, punching, pulling, poking and dragging at the wet cloth, whence streams of rain ran down the stick into her sleeves, succeeded at last in getting it into place. Then she must hold the edge while Agricola drove the tacks—and while they worked thus patiently, the bold, bad Feeble boys came out on their porch and jeered audibly. "And all this," said Artemisia under her breath, as she pulled smooth the cross-grained edges of the gable-piece—"all this is endured for the sake of these exacting, tyrannical chrysanthemums."

After the last tack was fixed, it was found that the wall-cloth did not reach the ground by about six inches. "But this will do for to-day," said Agricola, as he hung up his wet coat in the kitchen, "and when it stops raining I will nail some boards around at the bottom—they're safe for the present, anyhow—there'll be no frost while it rains."

"It will clear off cold," said Artemisia, "and then look out!"

The next day it still rained and blew tempestuously and Artemisia was in a continual terror of anxiety about the unbleached-cotton house, expecting any moment to see it rise bodily in the air and make sail for Cheesequake Creek, or some other classic locality. The rain descended and the floods came, and the winds blew and beat upon that house—but it fell not, neither did it rise and sail away on the wings of the storm. Not because it was founded on a rock, for it stood on clay. "And that," said Artemisia, grimly, as she looked, for the hundredth time, from the kitchen window, "has a grip like a snapping-turtle, or a Jersey farmer—neither of which ever lets go what it once gets hold of. Several times during the day she took advantage of a lull in the storm to visit her blooming pensioners, which had developed very rapidly since they were housed. Oddly enough, these plants, though impatient of removal while their leafage is grow-

ing, will endure transplanting without even wilting after their flower-buds begin to show their color.

"Ah, you beauties!" exclaimed she, addressing them, as was her wont, though she had nearly scalped herself in stooping under the low entrance of the muslin tabernacle. "I believe you know how lovely you are, every one of you, and delight in it, and are trying to repay me in beauty for all the work and worry I have endured for you! Do you know that I've daggers in my spine, and lightning-stabs in the side of my head, and a crick under my shoulder, and a stiff neck, all because of you? Not that it's of the least consequence—I would suffer all this, and ten times more, to save your lovelinesses. For you and your kindred, all the other sorts of flowers, are, I believe, the only real associates I have ever had—the chief solace of a rather solitary life. I love you, every one, and like you about me always, out of doors and in, and should still wear your beauty on my breast if there were not another soul but myself in the world. For you are the faithful friends who are not only grateful for love and care, but not ashamed to show your gratitude—and you love me just as well, and smile on me just as brightly, as though I were young, and fortunate, and flattered and beautiful—and you will still smile on me when I am bent, and withered, and feeble and tottering, if I live till then. Fragile as you are, you are yet more dependable than many friends; human promises may fail, human love may wither and cease, youth may fade, Hope may sell her anchor for old iron, possessions may vanish and opinions change—there's no depending on any of them; but I know for certain that the roses will greet me in May and June, and that you, my darlings, will come in October. Ah, beautiful Madame Audiguier, how tall and fair you are! And you, Source d'Or, what a mass of rich color you show! And there's Elaine, soft and white as Thanksgiving snow, and charming pink-cheeked Perfection, and splendid coppery Chang—I wonder which is finest! What a magnificent Gorgeous; there never was so clear, ethereal a yellow in any earthly flower. And how rich is that Golden Beverley—how dainty that tender Delicata! What a deep velvety maroon has Francois Delaux! and how delicate is this carmine-edged St. Martin! That deep yellow Gloria Mundi is almost globular—and what a lovely Old Blush! And Progne has an odor of violets and Iolanthe of lilacs—and that Brazen Shield seedling of Agricola's is a beauty. And that Jeanne d'Arc looks exactly like a great snowball, tinted with faint lavender—and there never could be anything more nearly perfect than this Mrs. Marsham! One need not be a Persian in order to sit and contemplate in silence, for hours, so superb a creature. And what a wonderful Laciniatum! Do you, beautiful visions, belong to this world, or am I dreaming?"

So talked the ordinarily staid and self-contained Artemisia, as she went her worshipping way among her mute friends. If she had lived in Salem, in the days of our godly forefathers, she would surely have been hanged as a witch and her innocent favorites destroyed as her "familiars." Had she been overheard now by any of her literal Jersey neighbors, she would have been considered a fit subject for *ad inquirendum* proceedings and a

speedy commitment to the nearest hospital for the insane, even Trenton. But in that severe storm, not one of them came within earshot.

When the rain cleared away people began to visit the garden. The story of the beautiful collection of flowers had spread in all directions more rapidly than it could have been sent by telegraph. From all parts of the town, even from neighboring towns, persons of whom Artemisia had never even heard came at all times of the day and wished to be shown through the chrysanthemum-house. All asked the same questions, and all used the same adjectives, "Beautiful! magnificent! I never knew there were so many colors of this sort of flower! Did you raise them from seed? Did they grow in here or outside? Will they grow from slips? Do you sell them?" were repeated over and over again, until Artemisia was weary of answering. And now her "uneducated" flowers were found useful, as every visitor expected a handful to carry home, and Agricola would have gone wild at the thought of losing his splendid exhibition flowers. Bushels of her own favorites did Artemisia therefore mercilessly break and give away, until there was hardly a house in town which had not a bouquet from her garden.

But the weather presently showed signs of turning cold. So Agricola proceeded to nail boards all along the "under-pinning" of his cotton house to keep out the wind; taking for his purpose Artemisia's plant-shelves, the shelves from the cellar pantry, and everything else he could find in the shape of a board. Artemisia declared that she had to hide the ironing-board and the extras of the extension-table to keep them from being pressed into the service also. When he had finished the work he came in exultant. "They're safe now," said he; "they will keep from freezing there until long after the Horticultural Exhibition."

Artemisia looked out from her chamber-window at the white tabernacle that night with that feeling of security which is so delicious after long anxiety. "How delightful it is," said she, meditatively, taking out her hair-pins, as she stood regarding it, "to be able to go to bed without that awful worry! It seems as though I hadn't really slept for a month." And with a long breath of relief she put her head on her pillow, with the determination to keep it there until morning and not once look out at the window.

Agricola's first act in the morning was always to visit his flowers. While Artemisia was busy with the breakfast preparations, he suddenly came in with a face as white as ashes. Artemisia regarded him with speechless terror. "They are gone!" exclaimed he, wildly—"every one of my beauties—just *gone!*" "Gone?" echoed she, bewildered, "has anybody——"

"Frozen stiff," replied he, "every one of them spoiled, I believe. I wish you hadn't told me to nail them up so tight. ('I don't remember that I did,' said Artemisia, parenthetically.) It's just that that froze them. If a little wind could have got in they wouldn't have frozen.

The moisture from the wet ground condensed on them in that confined air and just turned to frost. Don't you think I had better sprinkle them with cold water?" asked he, humbly.

The sprinkling theory was a debated point between the two. When Artemisia's plants got touched by frost, she always gave them a thorough drenching with cold water, for which he always ridiculed her, assuring her that the cold water only froze them harder. But now that calamity was upon him, he was willing to take advice, even from her. Sorry as she was for him, she could hardly repress a smile at his unusual docility. "I believe in cold water," she said, "but I don't wish to take any responsibility in this case. If you say sprinkle them, I'll help you."

So the plants were thoroughly sprinkled with cold water. "After all," said Artemisia, consolingly, "they are not all spoiled. There are some beauties left untouched. You can still make quite a show at the exhibition." But he would not be comforted. All day he vibrated between the flower-house and sitting-room, bewailing the disaster, and in his grief forgot even to be reasonable. "I wish you hadn't advised me to sprinkle them," he said, "I believe they are the worse for it. What a pity it is! After all these months of work! After all the care and worry and expense to be entirely ruined in one night!" And despair sat on his soul like a raven on a sepulchre.

"I declare," said Artemisia, trying to be jocular, "I believe if, when you woke this morning, you had found *me* struck by frost, you wouldn't have felt half as badly, or looked and acted so completely bereft!" But he had not even the heart to dispute her.

"It seems to me," said she, that evening, as he sat glooming over a newspaper, "that when anything which was undertaken for a delight becomes a burden and a worry—when a pleasure becomes a tyrant, and rules as with an iron rod—when, in short, the cultivation of flowers manages to destroy all one's peace by day and all one's rest by night, it is time to drop it. Now, I am as fond of flowers as you or anyone else can be. I have denied myself many a luxury for their sake; I have bought them when I had not a silk dress in the world; I have done no end of hard work for them. But I will never waste another year in trying to grow these flowers in the open air of New Jersey. I will never again undertake the cultivation of three hundred different kinds of them without, at least, a suitable house for them. That's what *I* think about raising chrysanthemums."

Agricola mournfully agreed. But after all his despair, his flowers (although there was never a Tyrian purple, a cochineal-red, nor a sky-blue one among them) took several prizes at the Horticultural Exhibition, several at the American Institute Fair, and one or two at the Philadelphia show, in all more than fifty dollars.

But they had cost him (without reckoning time, labor, worry, or Artemisia's neuralgia) more than two hundred.—*Selected.*

HOME DECORATIONS.



DESIGN FOR OUTLINE EMBROIDERY.

Banjo-Cover.

A VERY pretty and odd banjo-cover can be easily made without much expense or trouble by purchasing a yard and a quarter of dark blue flannel, which usually comes double width. Divide the material in two pieces, one for the front and the other for the back. Cut them out the exact shape of the banjo; then stitch the two edges together neatly. The seam extends all around the outside, except at the bottom, where an opening is left just wide enough for the banjo to slip in and out easily. Hem both edges neatly and make three buttonholes directly opposite and a little above the hem on each piece. Bind the buttonholes with satin ribbon. It only takes four yards of ribbon, two of scarlet and two of dark blue. Join the two colors together. Allow enough for a long, full bow when tied at each buttonhole and a bow at the neck of the cover.

Embroider the initials on one side and the word "Banjo" on the other in cherry silk.

As the banjo has become a fashionable instrument, this little article will not fail to be admired, as the pattern differs from the old ones. It is not only a novelty, but a pretty present to give a friend who may need one.

KITTY CLOVER.

Outline Embroidery on Bolting-Cloth.

BOLTING-CLOTH is a strong silk grenadine, and many very beautiful articles can be made of it.

Outline embroidery with etching silks is especially suitable and designs of forget-me-nots, harebells, or instead of flowers some conventional design in several colors is pretty, such as blue, olive, pink and gold.

The arrangement of color for the design given is gold for the circle, blue for the rays within it, pink and olive for the stitches outside the circle, alternating the colors in these.

Tidies of bolting-cloth are delicate and pretty, and a very beautiful toilet-set can be made of it, using the design just described.

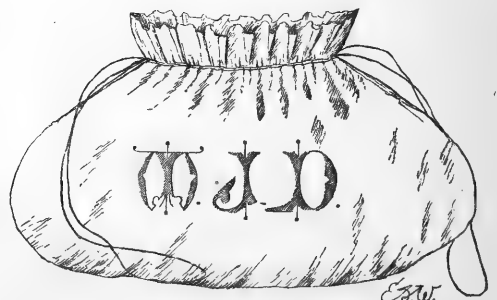
When the embroidery is finished the material is lined with color, which gives it the appearance of the daintiest of brocades.

The edges of both the toilet-table and the pin-cushion should be trimmed with lace, and bows of satin ribbon should be placed at the corners.

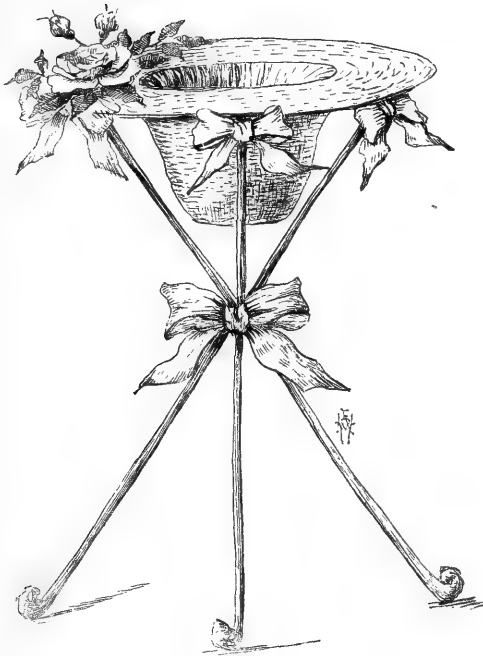
Sachets, glove or cravat cases are all very beautiful, covered with the bolting-cloth, lined with colored or else white silk or satin, as one may fancy.

Designs of flowers can also be prettily arranged on disks. For instance, harebells are appropriate. The flowers are, of course, blue, the leaves and stems olive, the outline of the disk either pink or gold, in each case embroidering the flowers and foliage with their own color and the disk with one that harmonizes prettily. The effect is also very pleasing when the disks are painted with water-colors, to give a tinted background to the embroidered design. To do this, mix the paint with gum-arabic water and place a blotter underneath the cloth to absorb the moisture when applying the color.

M. E. WHITTEMORE.



BAG FOR HOLDING GOSSAMER.



WORK-BASKET.

Bag for a Gossamer.

A BAG for holding a gossamer is much more convenient than a case, as it can be carried on the arm and not be in the way when shopping or traveling. Black satin makes a very pretty and durable bag, as it sheds the dust and rain; dark flannel or ladies' cloth is also used. To make the bag you will need a piece of the material measuring, double, thirteen inches wide and ten inches deep, to allow for seams and the ruffle at the top. Embroider the initials on one side in subdued shades of crewels that will look well on the satin or cloth. Put a double shir string of silk braid in the top.

E. S. W.

Hanging and Standing Baskets.

COMMON straw hats, such as are used for bathing, can be so arranged as to make very pretty wall-pockets or standing-baskets.

For a wall-pocket the hat is thoroughly gilded on the outside, and also on the under part of the rim, with gold paint, and a full lining of pink satin is neatly fitted in the crown. It is well before gilding to sew a wire, such as is used for bonnets, around the under part of the rim, thus rendering it easier to bend in the desired shape.

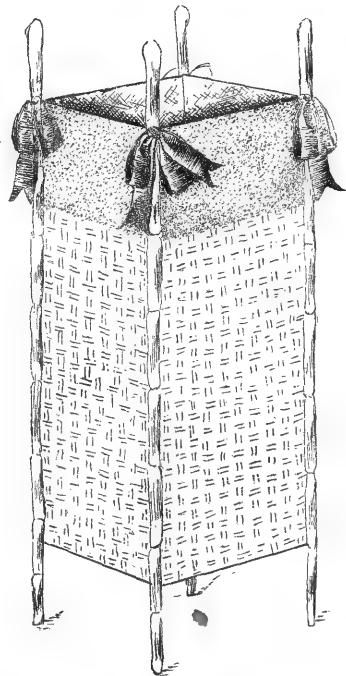
The front of the rim is then bent flat to the crown, sewed securely, and a bunch of pink roses, buds and foliage fastened on with a bow of pink satin ribbon about two inches wide. The opposite side or back of the rim is turned up so that the hat can hang flatly against the wall. Fasten at each side on the back of the rim a long ribbon loop, with a bow at the top.

Of course the colors can be varied; as for instance, light-blue satin lining, with forget-me-nots for trimming, or cardinal satin lining, with dark red roses for trimming. Then again a combination of colors is pretty, such as cardinal and gold, or blue and gold.

For the standing-basket the hat is treated in exactly the same way as for the wall-pocket, except that the rim is not turned at all, but left in its original shape. The basket is lined and trimmed in the same manner as for the wall-pocket.

The stand is made of three canes and an embroidery ring. On three sides of the ring, and at even distances apart, the canes are fastened by boring a small hole through each cane. A fine but strong wire is then run through each hole and through a corresponding one in the ring, thus binding the cane firmly to the ring. Twist the ends of the wire tightly together on the inside of the ring. The ferrule end of the cane is to be fastened to the ring, as the handle forms a pretty foot for the leg of the table or stand. The three legs are then crossed about half way, or a little less than half way, down. A hole is bored through each and all three are securely wired together; a satin ribbon bow hides the joining. The hat is then placed in the ring and wired fast at the three places where the canes are fastened. A bow of ribbon is used to hide the joining. They are exceedingly pretty baskets for fancy work and take the place of a little work-stand.

Four bamboo canes make a convenient standard for a scrap-basket. Instead of the basket, a pretty receptacle for waste papers, &c., can be made by cutting from heavy pasteboard four pieces fifteen inches long and ten inches wide for the sides, and one piece ten inches square for the bottom. After covering one side of each



SCRAP-HOLDER.

piece with pink sateen, sew the sides and bottom firmly together with linen thread, having the sateen on the inside for the lining. The outside should be covered with a plain reed splasher, such as can be purchased for ten or fifteen cents—its width will answer for the height; draw it snugly around the pasteboard and join the ends neatly. A band of crimson plush, three inches wide, finishes the top, and bows of pink satin ribbon fasten the canes to the corners.

W.

Decorative Notes.

BAGS for holding soiled collars and cuffs are made of fringed towels; those which have a netted fringe and a drawn-work border are most desirable for the purpose. One towel will make two bags, as but half its length is required. Fold the ends of the towel together and cut it by the fold in two equal parts. Make an inch-wide hem on the raw edge, through which to run a ribbon to suspend the bag, and sew the sides of the towel together. Embroider on one side, in outline, the words collars and cuffs, run a ribbon through the drawn work and tack the two sides of the towel together just above this.

An odd butterfly arrangement is made by painting an ordinary wooden clothes-pin a jet black. Two silver wires are fastened in the head to represent the feelers or antennæ and a Japanese handkerchief, folded twice so as to make it about ten inches long and five inches wide, drawn half way through the split and pushed close up to the body of the pin, answers for the wings.

An old-fashioned towel-rack can be so arranged as to serve the purpose of a work-basket and a screen and prove very convenient to a person who is confined to a chair. A writer in the *Domestic Monthly* describes the arrangement as follows:

"An old-fashioned towel-horse is needed; one with two rails at the top and two lower down. The space between the top rails is filled in by cardboard, forming a long, narrow box, sewed with coarse linen thread and covered with cretonne, then fitted into the rails and fastened to them. This holds thread, needles, scissors and all the working implements. A lid is made to this box, sewed to one side and fastened down with ribbon ties on the other. Between the two lower rails is suspended a wide, shallow bag of cretonne, reaching almost to the floor. Over the whole falls a curtain of cretonne, suspended by brass curtain-rings from one of the upper rails. On the other side is a piece of Bolton sheeting or Fayal crash, fastened to the upper and lower rails to keep it firm, and painted with a bold design of grasses, flowers, rushes, &c., forming an ornamental screen, with a band of velvet across the top to hide the rail and to give it a finished appearance. If preferred, the screen side can be embroidered with suitable materials. Here on one side we have a pretty screen, always a welcome ornament, and on the other everything that a needlewoman desires. Bows of ribbon are tied on the four corners. If the towel-horse is old and worn it should first be painted."

The *Boston Transcript* asks: "Is a botanical dictionary an immensely expensive volume, or why is it that

the ordinary designers of screens, cushions and similar articles produce such impossible blossoms? Half a year ago a Boston woman had a vision of a screen which should represent autumn, and on which should grow some sumach, some golden-rod, some succory and some field daisies. A weary pilgrimage showed her that nowhere except at the Decorative Art Rooms was there much knowledge of any of these plants except the daisy; but at last she found a person who undertook the work of making a design. The result was sumach with peach leaves and no berries; daisies with seven or eight narcissus-shaped petals to the flower; succory shaped like mustard blossoms, and golden-rod with yellow flowers protruding from the stalks here and there; in short a quantity of spoiled cloth. The moral is obvious. Either use the very good designs to be found at all the best shops, or employ an artist. The half-way 'designer' who does not know a cotyledon from a cotton plant, is an expensive luxury."

C.

The Best Mode of Tracing Designs.

ALTHOUGH there are numerous methods advertised for marking designs on material for needlework, the only really satisfactory one for what may be called artistic work is painting by hand. The *Art Amateur* describes the process as follows: "The design is first drawn on tracing-paper and cloth, and the outline carefully pricked out with a needle fixed into a piece of cork or sealing-wax, or whatever the worker finds most convenient. The pattern is then laid face downward on the material and kept in its place by small blocks of lead of sufficient weight. Pounce, made of a mixture of pipe-clay and charcoal, is then rubbed over the pricked lines with a pad or stump made of tightly rolled flannel. The pattern being then lifted off, the design will be indicated in dotted lines of pounce. A little of this may be blown off if it lies too heavily and is likely to clog the brush.

"With a fine camel's-hair pencil and oil paint—either black or white, according to the tone of the ground—this outline must be followed, holding the brush very upright. Considerable practice is required to trace well, and not until the brush can be quickly and dexterously wielded will the outlines be good. It is not loss of time, however, for no other practice gives so free and firm a touch as that of drawing with the brush on woven fabrics. Very much depends on having the paint of the right consistency, and turpentine must be always at hand to thin it to a condition which will allow it to run easily. The paint is best in tube, only putting a small quantity at a time into a very shallow saucer, which gives room for the brush to be pointed on the edge before it is used on the fabric. Rough materials and plush are the most difficult to paint.

"Many efforts have been made to substitute Chinese white and Indian ink for the oil-colors, but experience proves that they are not satisfactory. Before beginning to paint, the worker should see that her design is perfectly placed on the material. For this she should use a measure. Having ascertained by this means the exact spot at which the pricked pattern is to be laid, she may

mark it with a piece of tailors' chalk very lightly. If, on removing the pattern, there is any defect in the position, the pounce must be entirely dusted off, and more careful measurements taken. It is often necessary to rule a line lightly with tailors' chalk first, so as to keep an even distance from the edge. Where the fabric will allow it this line must always be taken by the thread. In linens it is sufficient sometimes slightly to pull one thread, so as to give the straight line.

"One great reason for the inferiority of all stamped or printed designs is that they are never accurate. They are hastily printed, for cheapness, and are almost always crook-

edly placed. This does not become apparent until the material is worked on or washed, when it goes quite out of shape. Another disadvantage of the cheap modes of marking designs is that they are always the same. To cover the first cost of producing the block, dozens, or perhaps hundreds, must be produced. Hand-painted designs may be infinitely varied, and adapted to all shapes. A clever worker will 'make up' a design out of different portions, pouncing it out first on her material and altering anything she does not like, putting in the curves with tailors' chalk. When she has got it right she then proceeds to paint it."

HOUSEKEEPING.

Green Corn Cut from the Cob.

After freeing the corn from husk and silk make a cut through each row, then, with the back of the knife, scrape off the corn and you have the kernel without the husk. Boil the corn for fifteen minutes in a granite saucepan, using just as little water as you can without burning, then season it and add sufficient milk or cream to make it as thin as desired and serve hot.

Green Corn Fritters.

Grate enough green corn to make one pint. Beat thoroughly two eggs, add to them one gill of sweet milk, one teaspoonful of salt, one-quarter of a teaspoonful of white pepper and a tablespoonful of melted butter. There will also be required one-half cup of flour; this must be moistened with a little of the liquid ingredients, beaten till smooth, and then the rest of the milk and eggs added, and last the corn. Make into small cakes and fry brown in a little hot suet, or suet and butter mixed. They must be served immediately.

Green Corn Boiled.

Strip off the husk and carefully pick off the silk. Boil in salted water, or steam over a kettle of hot water. Twenty minutes will be sufficient time to allow for boiling. If steamed, a little longer time will be needed, but avoid cooking too long, as it hardens the corn.

Summer Squash.

If very young, simply wash and slice them, without removing skin or seeds. Steam till tender, mash through a colander, season with salt and butter, and serve hot like all other vegetables. If they are not very young, peel them thin, not thicker than an apple, and steam. Put them through a colander to remove the seeds, and season with salt and butter as before.

Mayonnaise Sauce with the Yolks of Six Eggs.

The ingredients should be set on the ice before beginning to mix them, and if the weather is warm the bowl that is to be used should also be cooled. One-half pint of best olive oil, two tablespoonsful of vinegar, yolks of six eggs, one-half of a tablespoonful of salt and a pinch of red pepper. Be very careful in separating the yolks from the whites that not a particle of the white

adheres to the yolk. Beat the yolks with an egg-beater, and as soon as they are broken begin to drop the oil on them, only occasionally a drop at first, then two or three drops at a time. When they have been beaten ten minutes, if the mixture begins to thicken like jelly, it is time to add the vinegar, which should be put in a half-teaspoonful at a time in alternation with the same quantity of oil until both are used. Then add the salt and pepper, give the whole a thorough beating and set on the ice until time to serve the salad.

Young Onions.

Remove the tops, wash and peel. Boil in hot water for twenty minutes, then drain off the water, and cover them with hot milk and water, using the same quantity of each. Let them boil till tender, drain and cover with rich milk or cream, season with salt, pepper and butter. All vegetables are of better flavor when not cooked in iron.

Ambrosia.

Instead of the usual sliced oranges, pare and cut in small pieces a thoroughly ripe pineapple. Put a layer of the pineapple in a glass dish and sweeten it; then add a layer of grated cocoa-nut and continue in alternation until the dish is full, having the cocoa-nut for the last layer. Angel-cake or common sponge-cake will be a suitable accompaniment.

Jelly Cake.

Three eggs, one cup of flour, one cup of powdered sugar, two tablespoonsful of water, one and one-half even teaspoonfuls of cream-of-tartar and one-third as much soda. Sift the cream-of-tartar with the flour, beat the eggs separately, add the sugar to the yolks, stir in the flour, next the whites of the eggs beaten to a stiff froth and last the soda dissolved in the two tablespoonsful of water. Bake in a large roasting-pan well greased. When done spread with jelly and roll up, pin a napkin around it to preserve the shape and set it away to cool.

Cream Candy.

The white of one egg, an equal quantity of cold water, and sufficient confectioners' sugar to make it stiff enough to handle and form into balls. A great variety can be made by using different kinds of nuts and candied fruits. Press them in the balls before the candy stiffens.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

Death of Secretary Harrison.—It is our sad duty to announce the death of one of America's most enthusiastic horticulturists. Mr. A. W. Harrison, recording secretary and treasurer of the Pennsylvania Horticultural Society, who resided at No. 122 Queen street, Germantown, died at sea on August 22, while en route from Liverpool to New York on board the steamer Queen and his remains were buried at sea. His family are nearly all devoted to art and literature, and he leaves a daughter who has attained quite a reputation as an artist.

* * *

New York Horticultural Society.—A special meeting of this society was held August 10, for the purpose of electing a secretary for the unexpired term, in place of James Y. Murkland, deceased. John Thorpe, Esq., was duly elected, and immediately entered upon the duties of his office. Those who know Mr. Thorpe will rejoice at the selection the society has made; those who do not know him need have no fears that the duties of the secretary will not be performed in the most impartial manner. The fact of his being an exhibitor, and one of the largest, will only tend to make him more careful and considerate in protecting the rights of others and less mindful of his own.

The committee to whom was referred the duty of preparing resolutions in regard to the memory of James Y. Murkland make the following report :

The New York Horticultural Society have learned with deep regret of the decease of James Y. Murkland, Esq., the esteemed secretary of the society ; therefore,

Resolved, That we place on record our appreciation of the services of one who has for the past eight years served the society faithfully and well in an office requiring great intelligence, strict integrity and untiring industry. All who have from time to time been associated with him remember well his cheerful countenance, kind words and indefatigable energy, which he freely gave to the work in which he was engaged. We would pay our tribute to his industry, honor, perseverance, economy and business enterprise ; to his public spirit, his Christian virtues and his untiring zeal in all that tended to elevate manhood.

Resolved, That while we mourn the loss of a good and noble man, in the prime of life, and would gladly have averted the fatal shaft, yet we dare not call in question the wisdom of Him who doeth all things well. And that we tender to his widow and children the tenderest of human sympathies.

Resolved, That these resolutions be entered on our records, and that a copy be transmitted to the family of the late Mr. Murkland.

* * *

American Horticultural Society.—The seventh annual meeting of the American Horticultural Society (formerly Mississippi Valley Horticultural Society) will be held in the city of Cleveland, Ohio, commencing on Tuesday, September 7, 1886, and continuing four days, or until the business of the society is completed.

This important meeting, the first to convene under the broad and comprehensive title which the society now assumes, has been located at Cleveland in response to invitations by the Ohio State and local horticultural societies, and by citizens of the beautiful and enterprising "Forest City" who take an interest in the art of horticulture. The generous horticulturists of Ohio and of the city of Cleveland will make all welcome who attend these meetings. From a very extensive correspondence we are assured that this will be one of the most important meetings of its kind ever held. Noted horticulturists and scientists from almost every State and Territory of the United States and from the Canadian Provinces will be present and participate in the meetings.

According to schedule of topics there will be twenty-five papers on subjects pertaining to horticulture. The FLORAL CABINET will be represented by its editor, C. L. Allen, who will read a paper on "Profitable Horticulture."

* * *

The *Gladioli* this season, in the vicinity of New York, surpass anything previously known in this line. The cool, wet season has been most favorable for perfect development of plant and flower. The spikes are nearly twice their ordinary length and the flowers are correspondingly large and strong. We hope to give in our next number a list of American seedlings not before noticed.

* * *

Lilium Speciosum Album Præcox, var. Krætzeri. —This far surpasses any of the other varieties of this noble section of the most beautiful family of herbaceous plants, and we have never before really known this lily, as it has not until this season become thoroughly established and never before has the season been so favorable for it. The flowers are pure white, perfect in form, petals regularly reflexed, clasping the stem. The centre of the flower presents a greenish star and the base of the petals are heavily crested. We do not hesitate to call this the most beautiful lily grown.

* * *

Wanted, a New Rose.—At the recent banquet given to the Society of American Florists by George W. Childs, the happy suggestion was made by John W. Frazier that the florists should undertake to grow a rose more fragrant and desirable than any already in existence; that the result of their efforts be submitted to their annual meeting in Chicago a year hence, and that after a committee of florists shall have decided upon the production possessing most merit, it shall be christened the George W. Childs rose. Mr. Frazier very properly said that recent productions in rose culture had been designated as the "American Beauty," "Her Majesty," "Victor Hugo," and "William Francis Bennett," and why not name one more meritorious than any of these the George W. Childs?

China Pinks.—We cannot too often speak a good word for the different varieties of *Dianthus*, popularly known as China pinks. They can be successfully grown as annuals. The seed sown in the open ground early in May will produce plants covered with bloom by the middle of August. We prefer to sow the seed now and have the plants in full flower in June, when flowers are not so plentiful. Both methods can be adopted and the result will be flowers from June until November. Plants from seed sown now will require to be covered even to their tops with newly-fallen leaves, to protect them from freezing and thawing during winter. The leaves can be kept in place by some brush or narrow pieces of board.

* * *

Rose Leaves.—A new use for roses, or for roses that are not fit for florists' uses, has been discovered. A New York dealer in "sample teas" buys up all the spoiled roses he can get and uses them to adulterate the tea he sells. A large proportion of "sample teas" sold at low rates are the sweepings of the auction-rooms where tests are taken from the different lots on sale. These, of course, are adulterated, principally with willow leaves, before the crop is put into chests. This enterprising dealer says rose leaves give the tea "tone." No doubt they are an improvement on willow leaves and other adulterations, both as regards flavor and healthfulness. The wholesale florists think this a decided improvement on the ash-barrel as a recipient for waste flowers, which, as material for the manufacture of English breakfast tea, bring \$1.50 per bushel.

* * *

Cucumbers.—Not far from Moscow there are whole colonies, the inhabitants of which occupy themselves solely with the cultivation of the early-forced cucumbers. Thanks to the immense near-lying forests the heating of the hot-houses is cheap, and the gastronomes have fresh, tasty cucumbers even in January at very moderate prices.

* * *

A Sweet Posy.—The following recipe was found written inside the cover of an old herbal: "Take two moss rose buds, half open, a spray of rosemary and half a dozen of the flower heads of lavender, to which add a cluster or two of mignonette, three clove carnations, a small bunch of white jasmine and a few leaves of the sweet-scented verbenā (*Aloysia citriodora*). A correspondent of the London *Garden* having tested its efficiency, and found it not wanting, says: "If to the above you add a half-opened old Provence or cabbage rose, so much the better, and the result will be a sweet posy, which a duchess might like to have near her, and which, if tastefully put together, will delight the eyes as well as the nose."

* * *

Luminous Plants.—These plants have a peculiar charm to the grower and observer. One of the best is the fraxinella, or gas plant. It is an old favorite, perfectly hardy, a perennial of the very easiest culture and should be in every garden. In the calm summer evenings, when in bloom, a light applied to the base of the stock will

envelop the whole plant in a flame. This can be repeated time and again, and, it appears, with benefit to the ripening seed. This property was discovered by the daughter of Linnæus. The flowers are white or red and are very fine.

* * *

A New Industry.—Among the new industries of the South is to be the manufacture of castor-oil. A Florida firm is now preparing 320 acres to be planted in castor-beans, and next fall they propose to build an oil-mill.

* * *

The Weeping-Willow seems to have had a romantic history. The first scion, it is said, was sent from Smyrna in a box of figs to Alexander Pope. General Clinton brought a shoot from Pope's tree to America, in the time of the Revolution, which, passing into the hands of John Parke Curtis, was planted on his estate in Virginia, thus becoming the progenitor of the weeping-willow in America.

* * *

A Hint to Nurserymen.—A very thin coating of glycerine applied to glass will prevent frost forming on it in the coldest weather.

* * *

Nerines.—The following note, taken from the *Gardener's Magazine*, will be useful to many of our readers:

"Although I have a strong partiality for bulbous plants flowering in spring, I do not confine myself entirely to them. So far from this being the case my garden, greenhouse and pits contain so good a collection of bulbous plants that I am seldom without several kinds in bloom during the period between the end of February and the beginning of November. The collection is not so very extensive, but the various kinds have been selected with due regard to obtaining a succession of flowers, and to their contributing their full share to the attractions of the garden or greenhouse, as the case may be. I have not paid any heed to mere botanical curiosities, for I have neither the time to attend to them nor the space to spare for them, but I have subjects of great interest and beauty that are not often seen in the hands of private cultivators. The plants to which I am desirous of referring in this note are the nerines, a group of bulbs of the most elegant and beautiful character, and additionally valuable because of their flowering in the autumn, when flowering plants are not very plentiful, if we exclude the chrysanthemums and zonal pelargoniums. The nerines, of which the Guernsey lily, *Nerine Sarniensis*, is the best known, are nearly hardy, and can therefore be most successfully cultivated in a pit or greenhouse, and a pit from which the frost is just excluded well affords them quarters as suitable as could be found for them. Beautiful as is the well-known and highly-esteemed Guernsey lily, it is quite surpassed in effectiveness by some of the less known kinds, which, by the way, can be grown on from year to year instead of having to be replenished by the aid of the nurseryman every season, as in the case of the kind mentioned. I have nearly all the kinds, and the most beautiful are *N. corusca*, brilliant scarlet, a very beautiful and effective species; *N. curvifolia*, rich scarlet; *N. flexuosa*, rich vermillion, one of the most beautiful of the group; *N. Fother-*

gilli major, a splendid variety with larger flowers; *N. planti*, crimson shaded scarlet, a scarce and very beautiful form; *N. rosea*, a striking variety with flowers of large size and a rich rosy red color; *N. undulata*, rosy lilac; and *N. venusta*, rich crimson. The flowers of the nerines differ widely in size, but they are all borne in comparatively large umbels, and may be employed with much success in arrangements of cut-flowers; but I attach too much value to the flowers to have them cut. A light and rather sandy compost is the most suitable, and that which I have employed for some years past is prepared with turfy loam, four parts, and leaf mould, manure rotted to a powder, and sharp silver sand, a part each. It is necessary to well drain the pots, to supply liberally with water when the new growth is being made, and to keep rather dry when they are at rest."

* * *

A Curious Oak.—The Botanical Gardens, London, have succeeded in cultivating the kermes oak (*Quercus coccifera*), which, when punctured by one of the coccus insects, produces the ancient blood-red dye, supposed to have been used by Moses to tint the hangings of the tabernacle. The kermes oak is a dwarf, bushy shrub, somewhat resembling a holly, and grows profusely in Spain.

* * *

The Petunia.—No summer-blooming plant will yield a larger percentage of flowers with so little attention. On the steep sides of a high, dry mound, or on a level bed of rich, moist soil, the result is the same—flowers continuously until hard freezing weather destroys the plants. They do not seem to mind an ordinary frost that will kill the neighboring vegetation, but with the appearance of the sun a fresh lot of bright bloom opens as cheerfully as ever. The petunia is specially adapted for rockeries and vases, positions very trying to the majority of flowering plants. For general use the single flowers are much the most reliable and produce more bloom, but for pot-culture under glass the latter are the most showy. A very rich soil is not desirable, as in such the plants will produce more foliage than bloom.

* * *

Hardy Perennial Plants.—Every owner of a flower garden should have a choice collection of hardy perennial plants. For best results these must be divided and replanted every third year, and during winter protected with a forkful of coarse stable manure. This, with an occasional stirring of the soil about the roots, includes all the needful work. Autumn is preferable for planting, as growth in spring starts so very early that one is almost sure to be caught napping; and although with a very few exceptions all are readily moved, the transplanting should never be delayed until the new leaves are forming. For mixing with shrubbery or massing in odd corners, no other class of plants appear so thoroughly suitable.

* * *

The Weigelia.—Among all the introductions from Japan no genus of plants exceeds in usefulness the *weigelia*, or, to speak botanically correct, *diervilla*. The original introduction, *D. rosea*, is yet the best of its color;

but in whites a new variety called *D. candida* far surpasses the older *D. hortensis nivea*. It is indeed a gem, of strong growth, free bloom and almost pure white in tint. Of great value, although the tender young shoots are liable to be injured during winter, is the dwarf variegated-leaved variety. A curious little form with blood-red flowers is called *D. multiflora floribunda*. A German variety with deep rose-colored bloom, known as *D. grænewegenii*, is one of the most showy. *D. arborea grandiflora* is noticeable mainly for its strong growth and very large flowers and foliage.

* * *

Orange Blossoms.—A writer on "Emblematic Flowers" says: "The earliest use of orange blossoms for the wedding garland is attributed to the Saracens—the flower not only, but the fruit, having been adopted by the Paynims as emblematic of the purity and prosperity which constitute the chief elements of happiness in wedded life. The orange being introduced into France by the Saracens, and certain of the customs of the latter being ingrafted upon the Gallic practices and fancies, the orange blossom was adopted for the bridal crown; thence crossed the Channel to England, where it was adopted by our ancestors; and thence the fashion reached America. It has been said that the custom of using orange blossoms in bridal garlands was first introduced in England by Henrietta Maria, queen of Charles I.; and at any rate, as they are never made mention of by the older of the English poets, their adoption for bridal decorations must be comparatively modern."

* * *

The Eleventh Provincial Exhibition, under the auspices of the Board of Agriculture of Manitoba, will be held at St. Boniface, September 28 to October 1, inclusive. The department of plants and flowers is in charge of a committee of the Manitoba Floral Association. Numerous prizes are offered for exhibits and a suitable building for the reception of plants and flowers is being erected. In order to encourage the cultivation of winter-blooming plants in this locality a supply of bulbs has been ordered by the committee from one of the most celebrated houses in Holland, and three best-named hyacinth bulbs—one of each color, blue, red and white—will be distributed free to every member of the association.

* * *

Mignonette.—We copy the following from one of our foreign exchanges; while late for early winter flowering, there is sufficient time for late plantings which will give an abundance of bloom in early spring:

"I take it for granted that everyone who loves flowers would wish to extend the season in which the fragrance of mignonette may be enjoyed, and I am sure that were it more generally known how easy it is to have mignonette in bloom in winter, few windows would be without it. It is merely a matter of sowing some seed at the proper time, and sheltering the plants from cold and damp, and plants but little inferior to those grown in the summer season may be had in winter. Put a good-sized crock in the bottom of a four and a-half inch pot, with a pinch of soot therein to keep worms out, fill the pot with good

fine soil to within half an inch of the rim, make the surface firm and water moderately. Sow the seed thinly and place in a shady position till it germinates, after which time the young plants should get all the air and sun that they can. The last week in August and the first week in September form the seasons for sowing for winter bloom, and it is as well to sow two or three pots at intervals, as the character of the autumn will determine the time of the plants coming into flower. When very fine, the August sowings are apt to come into flower by the beginning of the winter, and when rather under the average in this respect, as regards warmth, the later sowings do not come into flower until the new year is well advanced. Five plants will be enough to each pot, and when they are four inches or so in height, four slender stakes should be inserted round the pot, and a piece of fine raffia passed from one to the other, which will keep the growing shoots in place. From the time they begin to grow freely, attend well to the watering, for if they suffer from want of moisture at the root the lower leaves are sure to turn yellow, and mignonette loses half its beauty when not well clothed with healthy foliage to the rim of the pot. At the same time some care is needful not to make the soil sour by watering when unnecessary. A cool room is the place for mignonette in winter, as it dislikes warmth and much confinement. An enemy which attacks mignonette, and soon ruins good plants if left alone, is a green caterpillar, so much the color of the foliage that a sharp eye is required to detect it. If not discovered, one will almost destroy a pot of mignonette in a single night. When the plants are housed it is quite small and only comes to full size during the winter, and, concealing itself on the undersides of the leaves, it is not seen unless sought for there."

* * *

Myosotis Dissitiflora Alba.—As this forget-me-not becomes better known it will be sure to find favor with all who require early spring flowers. The blooms are white and therefore it cannot fail to prove of great value to those who require early white flowers, whether for massing or the mixed border. The plant is a good grower, with a compact habit. Owing to its flowering so early in the spring it is sometimes slightly injured by frost, but it soon recovers itself, and starts away into bloom much quicker than could be expected. Those who have exposed gardens are advised, if they want very early flowers, to plant in a sheltered place. The proper time to plant these forget-me-nots is the autumn.

* * *

Plants Used by Man.—It is stated that the number of plants used by man at the present time does not exceed 3,000. Of these about 2,500 are cultivated in America. The varieties used for food do not exceed 600. Of edible fruits and seeds there are 100 classed as vegetables, 100 as roots and bulbs, 50 varieties of grain, about 20 of which produce sugar and syrup. In addition to this, perhaps 30 kinds will yield oil and 6 kinds wine. The number of medicine-supply plants is nearly double that of the fruit-yielding, amounting to 1,140, about 350 of which are employed in the various branches of industry. Of the latter, 76 furnished dyestuff, 8 wax, 16 salt,

and more than 40 supply food for cattle. There are no fewer than 250 kinds of poisonous plants cultivated, among which are only 66 of a narcotic sort, the remainder being classed as deadly poisons.

* * *

Ladies' Traces.—At the recent meeting of American florists in Philadelphia the accuracy of one of our correspondents was called in question by a gentleman who presides over the ——— Botanical Gardens. He had taken exception to "ladies' traces," a common name for spiranthes, considering that "ladies' tresses" should have been the term used. Our correspondent proved to him that the latter was a corruption of the correct name (traces), and after several pages of Professor Meehan were fired at his head, he acknowledged his error and his fair assailant withdrew victorious.

Books, &c., Received.

Report of the Missouri State Horticultural Society, published by order of the State. For good reports of horticultural societies we must turn to the West. We do not know of a book that has given us greater pleasure in its perusal than this report. The essays on various topics are far above the average, and decidedly more instructive than the columns of the agricultural papers of the day. There is something in these papers that one can take hold of; they have substance; they were written by men who know their business and have an interest in the development of their country and its productions. In the secretary's budget there is much food for thought; in short, the report is a valuable accession to any library.

The Eleventh Annual Report of the Montreal Horticultural Society contains some very interesting papers on the culture of fruits and flowers in the Province of Quebec.

M. Crawford, Cuyahoga Falls, Ohio, catalogue and treatise of small fruit plants.

Peter Henderson & Co., 35 Cortlandt street, New York, quarterly wholesale price-list of plants, bulbs, flower-seeds and requisites.

Johnson & Stokes, 219 Market street, Philadelphia, Pa., catalogue of bulbs, flowers, small fruits and selected farm seeds for autumn planting.

James Vick, Rochester, N. Y. Combined with the August number of *Vick's Magazine* is the fall catalogue of Holland bulbs, plants and shrubs; also a list of winter-flowering plants for house culture.

John R. & A. Murdock, Pittsburgh, Pa., fall catalogue of fruit and ornamental trees, grape-vines and hardy shrubs. Two new varieties of cherries, the Murdock Bigarreau and Rostraver Bigarreau, are being cultivated by Messrs. Murdock and are considered valuable additions, as they ripen after most other varieties are gone.

Oscar R. Kreinberg, Nicetown, Philadelphia, Pa. Price-list of pansies.

NEWSPAPER WAIFS.

A colored woman was heard this morning informing a neighbor that last night's storm frightened her so that she "shook like an ashan."—*Pittsburgh Chronicle*.

Customer—"But ain't the trousers too long?" Merchant—"Too long! Dey is made to fit a man ezzecky your size. If your legs happen to be a drifle short you must quarrel mit nature—not de tailor."—*Judge*.

It was at a dinner-table. His father was saying something to his mother about dynamite: "Oh," exclaimed Jack, looking across to Eloise, with an evident desire to impress her with his acquirements, "I know what dynamite is." "What is it?" inquired Eloise. "It's something that you blaspheme rocks with," Jack explained.

A FEW OF JOSH BILLINGS' EPIGRAMS.—There is no treachery in silence; silence is a hard argument to beat.... Don't mistake habits for character; the men of the most character have the fewest habits.... The man who is thoroughly polite is two-thirds a Christian anyhow.... Flattery is like cologne water—to be smelt of, not swallowed.... I have noticed that the man who is always telling what he will do when he gets there, never gets there.... When a man has a great deal to say he can say it in a few words.

FRESH AIR AND BATHING AS RESTORATIVES.

We believe in the theory and the practice of resorting to fresh air, mountain retreats, quiet country homes, seaside rambles, &c., as restoratives to enfeebled constitutions, but there are many chronically afflicted who find only temporary relief, and need a different revitalizing agent. The following letter illustrates this point and shows the wisdom of the one most interested in the case.

One of the favorably-known merchants of New York—one who has been planted and rooted for a long time in the same place—is Mr. J. H. Johnston, jeweler, of No. 150 Bowery, New York, where he has been established over thirty years.

Mr. Johnston has one of the cosiest suburban homes in the vicinity of New York, situated at Mott Haven, just across the Harlem River, in the northern part of the city. His wife is a most estimable lady, and is known as a writer of marked ability. Those who see her now, in the enjoyment of excellent health, would hardly suppose that four years ago she was an invalid wavering between the love of life and a constant prospect of death. To one of our correspondents, who visited her, Mrs. Johnston said:

"When I went to Washington to attend the inauguration of President Garfield I was exposed in stormy weather and caught a severe cold. It settled on my lungs, producing serious results, among which were an obstinate cough and sharp pains in my lungs. Mr. Johnston became alarmed and took me to Florida the following winter. I was by this time unable to sit up for a moment, and was with great difficulty conveyed to the steamer; overhearing the remark from a bystander, as I was being transferred from the carriage to my berth, 'there goes another to be brought back in a box.' The sunny days partially restored my health, but on the approach of winter again my cough increased and strength vanished. My appetite was entirely gone. I swallowed food in daily decreasing quantities, and from a sense of duty only. Still, I fought the idea that I had entered on the decline that ends in death.

"I had heard of Compound Oxygen and I determined to investigate it. My husband and I went to Philadelphia to learn its merits at headquarters. Dr. Starkey examined me, told me what I already realized, namely, that my case was a serious one and that unless the hemorrhages were checked I would not live over three months. I was deeply impressed with his earnestness. I tried the Compound Oxygen at once and found a prompt benefit. This increased daily and the cure eventually proved permanent. I was inspired with an enthusiasm for life to which I had long been a stranger. The weary, nervous depression to which I had yielded gave way to sunshine and hope. The pain in my lungs gradually faded away and the severe aches in my side no longer afflicted me. My sleep, before restless, became even and quiet. Shortness of breath was succeeded by a facility for using the full breathing power of my lungs. My capricious appetite became a natural one, and I began once more to enjoy life. Though I believe myself cured, I exercise care in avoiding exposure to colds. I always keep the Compound Oxygen in the house and take it on the slightest provocation. It always acts beneficially.

"I ascribe my cure to Compound Oxygen alone, as

I took no other medicine, and the weather prevented any out-of-door exercise. However, I never used it according to directions, but in sudden attacks of congestion or threatened pneumonia have taken it not as it could be inhaled every few minutes until relieved from the pain and suffocation, and when able to live in the sunshine took the Compound only before retiring. I really believe it is the remedy for all lung diseases, and you are at liberty to use my name in recommending it."



Many other interesting cases are printed by permission in a brochure of nearly two hundred pages, freely mailed to all applicants. Monographs are also published on various forms of disease which have yielded to its influence, and once each quarter the statements made by patients, with permission to publish, are printed in a little paper named *Health and Life*. Any part or all of this literature may be had by anyone sufficiently interested in the subject to write for it.

Drs. Starkey & Palen, of 1529 Arch street, Philadelphia, are the physicians who have succeeded in this line of practice, and they have enrolled on their books the names of over thirty-seven thousand patients, some of whom have made use of the Treatment at the Philadelphia offices, but the great majority have been reached at their homes by the aid of the express companies. All the States and Territories in the United States, and many foreign countries, are represented in the list of names.

The great advantage in using Button's Raven Gloss Shoe-Dressing is that it makes shoes look new and natural, not varnished, and will not injure the finest leather. Every lady should use it.

SCALDS and BURNS
Should have prompt and proper care or they may prove very dangerous and perhaps FATAL.

ACCIDENTS
are constantly happening. A kick of a horse or cow may cause a bad bruise; the slip of an axe or knife may result in a Serious Cut.


Any of these things may happen to one of YOUR family at any moment.

Have you a bottle of PERRY DAVIS' PAIN KILLER ready for use in such cases?

It has no equal for the cure of Scalds, burns, cuts, swellings, bruises, sprains, sores, insect bites &c.—All Druggists sell it.

PERRY DAVIS & SON, PROVIDENCE, R.I.

PROF. DOREMUS ON

TOILET SOAPS:

"You have demonstrated that a perfectly pure soap may be made. I, therefore, cordially commend to ladies and to the community in general the employment of your pure 'La Belle' toilet soap over any adulterated article."



Is made from the choicest quality of stock, and contains a LARGE PERCENTAGE OF GLYCERINE; therefore it is specially adapted for Toilet, Bath and Infants.

NEWSPAPER WAIFS.

Queen Elizabeth style is expected to come in again about 1888. This is, indeed, ruff.

The lower classes in Russia are not noted for cleanliness. The climate is not favorable to scrubbing.

It is stated that a young girl in New York is a skillful locksmith. She is probably one of those whom Love laughs at.—*Texas Siftings*.

"Where will you put me when I come to see you at your castle in the air?" asked a gentleman of a witty girl. "In a brown study," she replied.

"What an inveterate talker Charley is!" remarks Brown; "I never saw his like." Fogg replies, "Nor I, either; 'pon my word, I believe he would even talk to his wife rather than keep his tongue still."

Robbie, returning from school after a history lesson: "Mamma, was Charles II. an Episcopalian?" "No, my son, why do you ask?" "Well, the history says he did things he ought not to have done, and left undone things he ought to have done; and so I supposed he must be." (A fact.)

A floating item tells us that Omaha is the cheapest place in the country to die in. But why die in Omaha when one can live as cheap in St. Louis, and at the same time serve all the purposes of being dead in other localities? It is related by one of our most reliable citizens, who has traveled much abroad, that he once visited the catacombs of Rome. Deep in the bowels of the earth, surrounded by the mouldy skeletons of other centuries and oppressed by the weird gloom of the labyrinth of the dead, the traveler abandoned himself to solemn reflections. "This, then," said he, half aloud, "this is the city of the dim, mysterious past—the vast charnel-house in which the glory, the flower, the cream, the ambition of other generations crumble to dust! Grim mockery of mortality—genius of oblivion! This granary of human clay is thy cherished and supreme abode?" To this apostrophe a musty mummy of the time of Nero, the violinist, raising himself rheumatically from his couch in a mouldy niche, replied: "Stranger, I reckon you've never been in St. Louis, Mo."—*Chicago News*.

HALFORD SAUCE.
THE GREAT RELISH.

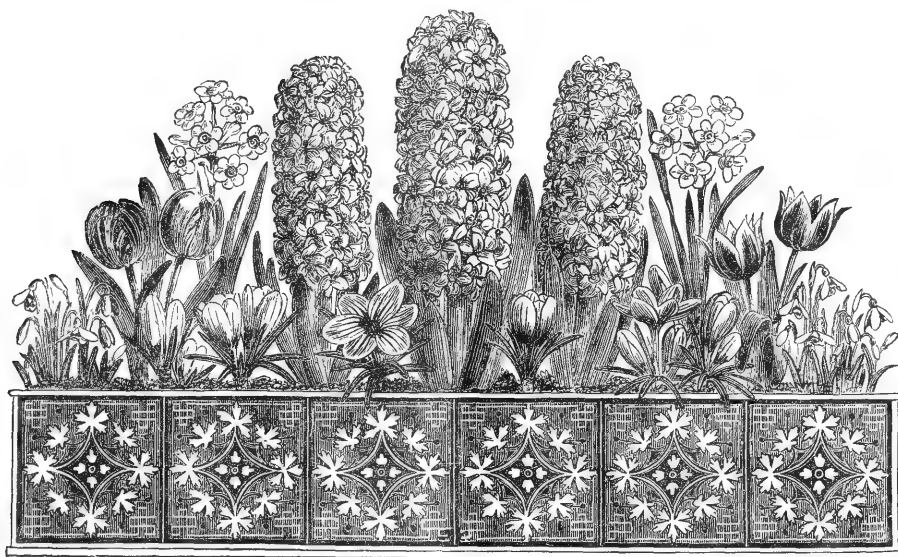


LADIES' FLORAL CABINET.

Volume XV.

OCTOBER, 1886.

No. 10.



WINDOW-BOXES.

WE are admonished by the browning of the leaves, cool nights and many waning flowers that autumn is at hand, and that before many nights cruel frost—no, not cruel, nothing in nature is other than genial—we will say, rather, timely frost, will destroy all the flowers in our gardens and our thirst for the beautiful must be satisfied with such flowers and plants as can be grown in the windows.

The most successful window-gardening that we have seen has been the result of the least effort, but effort rightly applied. The appliance was simply a wooden box the length of the window and sixteen inches in width; the outside was covered with common floor oil-cloth of unique pattern and bordered with plain black walnut molding an inch in width; this gave the box the appearance of tile-work. Its manufacture, though by an amateur, had a touch of genius about it, and there is no reason why a box for the window-garden may not be a pretty picture to look upon, instead of a coarse, inartistic object, as is so frequently seen.

There was quite as much good taste shown in the filling as in the making of the box; the perfect harmony of the two was what made it so truly artistic. The filling

was principally of smooth-leaved plants, mainly palms, which stand the dry heat of the living-room, as a rule, much better than the soft-leaved plants, though the pelargoniums and sweet-scented geraniums usually do well.

The box to which we refer was sixteen inches in width, as before stated; in the centre was a *Ficus elastica*, on each side were Bourbon palms, at each end were beautiful specimens of *Cocos Weddelliana*, the most elegant palm for the window-garden ever introduced. The outer row was filled with pelargoniums, mostly scarlet-flowering sorts; two were the bronze-leaved varieties, and two were "Happy Thought," which gave a pleasing relief to the whole. The inner row was reserved for hyacinths, tulips, narcissus and crocus. All the plants were in small pots; this prevented an overgrowth, which is a most undesirable feature in window-gardening. The pelargoniums, having been in pots plunged in the open border during summer and kept well pinched back, were now in the best possible condition for blooming, and right well did they improve their opportunity. They seemed to know what was expected of them, and, grateful for the good treatment they had received, they reciprocated with immense trusses of flowers.

But the beauty of the window-garden greatly comes from hyacinths and other Dutch bulbs. These, when properly managed, afford continuous bloom from January until the crocus and snowdrop assure us that spring has come. Now that hyacinths and other Dutch bulbs are so cheap, there is no reason why they should not be more generally employed. They should be planted in deep three-inch pots as soon as they are received, and plunged in coal ashes in any convenient, out-of-the-way place, where they may be taken in at convenience; the first should be brought in about the middle of November and plunged in the inner row of the window-box. This being the room-side, they will have but an indirect influence of the sun, which will be all that is required. They will be in bloom at Christmas, if the Roman hyacinths are used for the first flowering; these should be followed by such of the Dutch sorts as succeed best indoors, the colors and varieties, whether single or double, being altogether a matter of taste. As soon as the flowers begin to fade, carefully remove the pot and in its place put another from the reserve force. This operation can be followed until spring. What is done with the hyacinths can be as profitably done with the crocus, narcissus and tulip.

At the ends of the box a few seeds of convolvulus should be sown; the plants will, if the proper supports are furnished, run up to the ceiling and flower profusely during the winter. There is but one flower more beautiful than the morning-glory on the *outside* of the bay-window, and that is a morning-glory trained up on the *inside* of the window and in full bloom while the winter storms are raging and the thermometer indicates zero. If we could have but one flower it would be a morning-glory, and we would have it in winter, as it can be grown with but very little trouble.

The box, filled as we have stated, had the sunniest window, with a southeastern exposure, the best possible situation, for sunshine is an important element in the win-

dow-garden, if flowers are considered indispensable. One little feature which we had nearly forgotten to mention is that the pots in which the plants were grown were sunk just below the surface of their rims, and the spaces between were sown with the seed of the fine grasses; the grass was not suffered to grow more than half an inch high, which gave the box the appearance of a miniature lawn well filled with sub-tropical plants.

If none other than a northern exposure can be had flowering plants must be dispensed with, that is, in the outer row, and ferns should be substituted; they should also take the place of the crocus and tulips, which will not perfectly develop without sunshine. Hyacinths will bloom fairly well without ever seeing the sun, but much better if they can have it. A window-box can be filled with plants that will thrive without sunshine and afford a vast amount of pleasure. If for economic reasons palms cannot be employed, small evergreens, such as the dwarf arbor vitæ, can be employed to good advantage; they will afford a cheerful green and exhale a grateful aroma. Ferns can be used with these and form a beautiful combination. If a climber is desirable the English ivy will fill the place. If a more rampant grower is desirable it can be found in *Cobæa scandens*, a vine that delights in a shaded situation.

For the sunny window there are many other plants than those we have mentioned that can be used to good advantage. Let the box be filled with Tom Thumb nasturtiums, with a tall grower at each end to run up the window cases, and a more beautiful effect cannot be easily produced.

In filling a box with ordinary house plants, it is decidedly better to have the plants in pots, for then the box is perfect at the commencement, and will be more likely to remain so; by being plunged in earth they are not liable to suffer from drought, and will not grow so fast as to "draw up" and become unsightly, and the plants being root-bound will be far more prolific with bloom.

THE COLORS OF FLOWERS.

IN Westermann's *Monatschrift* Professor Vögel says: Our knowledge of the chemical properties of vegetable pigments is too imperfectly advanced for the effects of artificial treatment on the color tones of flowers to have received the attention the subject deserves.

My own view is that tannin is an important factor in the generation of various plant colors. It is found in nearly every plant, the petals not excepted, and under the influence of various re-agents—alkalies, earths, metallic salts, &c.—it assumes the most diverse hues, from pale red to deep black. A darker shade is thus produced in flowers rich in tannin when manured with iron salts, since as everybody knows, tannin and iron together dye a deep black and produce ink. This fact has been practically applied in the culture of hydrangeas and dahlias. The former, which in ordinary soil blossomed a pale red, became sky blue when transplanted into a soil heavily manured with iron salts or watered with dilute solutions of

alum. English gardeners, I believe, succeeded in producing black dahlias by similar manipulation. It is well known to every florist that a change of locality—that is a change, more or less, in the conditions of light, temperature and soil by transplanting—will occasionally produce new colors, whence it may be deduced that interrupted nutrition of the flower may, under certain circumstances, produce a change of color. I see no reason why the well-authenticated fact of the change of color induced by manuring with iron salts, thereby changing the nutriment of the plant, should not receive more extended application than it hitherto has done in floricultural practice.

Apart from chemical reactions there are physical circumstances which I believe also affect the colors of flowers. It is a well-known fact that a most intimate relation subsists between the color and physical state of bodies. We know that the minute subdivision of a pigment exerts a great influence on its shade of color. Thus

a piece of solid vermilion does not exhibit the pale red of the pulverized article, but, on the contrary, is of a dark brown, and only shows bright red when scratched by some hard substance, the color increasing with the degree of comminution. Mercurial oxide, which is deep red in the crystalline state, becomes a light orange-yellow under continued pulverization. Deep dark blue smalt can be converted into a perfectly colorless powder by pulverizing and washing, and no one would recognize it as identical with the original coarse-grained article. Gold in a very minute stage of subdivision has not the yellow color of the metal, but a bluish-green shade, and at first sight would not be taken for metallic gold at all, until the bluish-green powder resumes the golden hue on fusion. If we introduce a film of gold between two plates of glass

and hold them against the sun, the rays shine through with a bluish-green tint; but this transparency is only found when the film of gold is 1-2000th line or less in thickness. It is indisputable that in both these instances the color depends on the minuteness of the mechanical subdivision of the pigment. The same applies to the attraction in the color of bodies on passing into the state of gas or vapor. On passing into the gaseous form black iodine becomes violet, yellow sulphur becomes red, and blue indigo becomes purple. These and hundreds of other instances can be adduced of the intimate connection between color and physical condition. It is highly probable that similar processes occur in vegetation and contribute to influence the multiplicity of color shades in flowers.

HANGING-BASKETS.

ONE pleasant autumn day I went for a ramble among amateur florists, hoping the opportunity would furnish me some bit of knowledge and, perhaps, make some others a little wiser.

Figuratively speaking, I found the way profusely illustrated with hanging baskets and pots; but, I assure you, it was a heterogeneous collection. There were divers examples of this branch of gardening, from the modest moneywort rising from the depth of a vessel that had once warmly embraced the testaceous bivalve, to vases prettily fashioned for the purpose, and vines and plants more rare and costly. But these pots and vases, both plain and ornamental, were so barren of green things that they were not attractive to the eye nor an ornament to the window.

There was but one in the whole lot that could conscientiously be called a "thing of beauty," the rest, aside from the vases, had but little to redeem them from positive ugliness; and of what account is a vase, even though it be an elegant one, without its filling of thrifty plants and luxuriant vines? Whatever the receptacle, to make it graceful and lovely it should be completely wreathed with vines—climbers and trailers. A bare pot suspended at the window with only a few sickly, neglected vines hanging about it, is an unsightly thing; a source of annoyance instead of pleasure; but the other extreme, beauty and elegance, those delightful adjectives when associated with hanging-baskets, is seldom seen. And since we have had ocular proof that nine of every ten specimens are failures, or come far short of our ideas of success, let us see if we cannot find the cause and the remedy.

Of the many instances of failures that have come under my observation, I have found some inconsistency in soil, plants or position, and often the three existed in one pot. The first would be too coarse and hard, the second were uncongenial companions and not adapted to the places they occupied.

The soil for baskets should be light and moderately rich, and I prefer it a little sandy. If the basket is to

grace a south window, fill it with only such plants or vines as delight in sunshine and heat; and take care that you do not plant as companions the hard drinkers and the teetotalers, for the life of the one will be sacrificed to the other, or both will but barely survive. The same rule should be observed with baskets intended for shady windows; only those should be used that will thrive in such a situation, and almost every catalogue extant will tell you what plants are, by nature, best adapted to sunshine and shade, and many of these instructive and interesting books can be had for the asking. Or, perhaps, a better way for the beginner would be to send to a reliable florist, tell him what number of plants you want, to what exposure they will be subject, whether they will have a great or only moderate degree of heat, &c., and let him select the varieties according to his own discretion. I like this way even now after many years of experience, for a florist's selection of varieties often pleases me better than my own.

Another cause of failure is an insufficient supply of water. It should be borne in mind that plants suspended from the top of a window, or from the ceiling, are subjected to a warmer, dryer atmosphere than those below upon stands and tables; consequently they require water more frequently. Plants in a thrifty, vigorous condition should be watered thoroughly every day, and to do this properly take the basket to the sink or set it in a tub, and shower the foliage as well as the roots; for it is difficult to water plants suspended above us, and we are apt to be deceived as to the quantity they require or the amount given them, because if the water does not penetrate the soil readily it runs over the side, and this we accept as conclusive evidence that the vessel is filled to overflowing.

But says someone, "It is so much trouble to take down my baskets every day and wait for the drip to cease after such a shower-bath." Well, if we want a first-class window ornament in the floricultural line we must pay the price; if we are not willing to do this, then don't let us attempt this branch of gardening, for I believe that "Whatever is worth doing is worth doing well."

As far as my own experience goes it is less trouble and a saving of time and labor to do the right things at the right time, and to do them thoroughly. Trying to nurse a pot of sickly vines into healthy specimen plants is labor lost, because they cannot pay us for our care in the green of a healthy foliage or the beauty of buds and blossoms. It is a much better investment of time to supply their daily needs and thereby keep them glowing with health and vigor, for the beauty and elegance of such plants and vines well repay us for every moment of the time expended in their successful culture.

To those who have a taste for beautiful things and no money to gratify it, who are obliged to exercise wit to fill empty nooks and corners, let me suggest how a beautiful hanging-basket can be made from the most simple materials.

The shape of the vessel we are to utilize is of more importance than its looks, because when we are done with it the receptacle will be so covered with vines that it will not be visible to the naked eye.

An oyster can is not a desirable utensil for the purpose, but take a two-quart basin, it should be larger at the top than at the bottom, and paint the outside green; fill it with rich, mellow soil and plant it with seeds of red and white *maurandya*. Set it in any warm, sunny place; if it is summer time set outdoors until the

plants are up and fast covering the soil, then make a hoop of wire and slip over the bottom up to the brim of the basin and fasten to this hoop, at equal distances, five upright pieces of the wire to form the handle, making a strong loop at the top by which to suspend it.

Hang it at the window and train a vine up each wire, and all the rest down over the sides until the basin is completely hidden. Now, as soon as the vines are long enough, gather them into a small compass in your hand, six or eight inches below the bottom of your basket, but directly beneath its centre, and tie loosely, which will leave it somewhat like a balloon in form. In a short time it will lose its rigid appearance; the vines will continue to grow beneath and form into pretty festoons, while graceful, airy sprays will put out in every direction; and when the red and white flowers intermingle with the green drapery, it becomes in the truest sense of the word a "thing of beauty and a joy" to the possessor.

The *Pilogyne suavis* is another pretty vine for the purpose, or the two may be combined, planting slips of the pilogyne around the outer edge and *maurandya* in the centre, and train in the manner above stated. Coarse, stiff vines are not suitable, because they will not shut in those homely receptacles, converting them into objects of admiration that cannot fail to please the most fastidious.

MRS. G. W. FLANDERS.

BOTANY AND HORTICULTURE.

THERE is nowhere a broader field for practical research than in botanical science. A simple enumeration of common things which the farmer ought to know about plants, and which the botanist is entirely unable to explain, would fill columns. For instance, no one knows if cucumbers and melons, or squashes and pumpkins, will cross-fertilize and produce the same year fruits half cucumber and melon, or half squash and pumpkin; and the experimenting which is necessary to settle this seemingly simple problem is considerable. By general consent the domain of botany ceases when a plant is impressed into cultivation. This should not be so. It is legitimately the province of botany to follow a plant as long as it is a plant, and to explain to its cultivator the laws of its growth and improvement. At present we need botanists in the garden more than in the field. The crying demand of horticulture is some system of classification and nomenclature which will enable the ordinary horticulturist to name accurately an apple or a verben. All our varieties of cultivated plants have a number of names, and we are entirely unable to designate the proper name, or to determine in many cases if the variety is really new or worthy. The elegant system of botanical nomenclature can be applied, with some modifications, to cultivated plants. Our greatest need is for a system of classification which will enable us to identify horticultural varieties. How shall we classify all our varieties of apples? Surely not on size, color, flavor, time of ripening or length of keeping. We must dis-

cover permanent marks in flower and leaf and tree to aid us. Botanists should, therefore, enter the unoccupied field which lies between botany on the one hand and horticulture and agriculture on the other, and claim it as their legitimate possession.

It is a current notion among farmers that the aid which botany is capable of rendering to agriculture is small both in amount and importance. This notion is erroneous, as is another common idea, that the end and aim of botany is to classify and name plants. The botanist should study what the plant does and how it does it rather than simply what it is. What are the laws of plant growth? How does the seed germinate? How are flowers fertilized? What are the plants' relations to soils, temperature, moisture, intensity of light, to insects, and other active agencies? What is the physiology of diseases induced by unpropitious surroundings, by fungi and by insects? What are the phenomena of cross and close fertilization and hybridization? What is the physiological nature, and what the cause of changes produced by cultivation? What are the influences of plants upon climate and soil, and upon insects and also upon animals? These are some of the queries which modern botany seeks to answer. The phenomena of plant growth and plant biology are so intimately connected with intricate and variable problems, such as weather, soils and climate, that their solution demands more time than does a purely chemical or physical phenomenon.—*Selected.*

TWO NOTED ENGLISH GARDENS.

IN our December issue, 1885, we gave a full-page illustration of a wild garden belonging to our correspondent, Mr. Geo. F. Wilson, of Weybridge Heath, England. A description of his garden at Oakwood, and also one at Heatherbank, was recently published in the *Gardening World*, from which we quote as follows :

"In his gardens, now fast becoming notorious, Geo. F. Wilson, Esq., the chairman of the Floral Committee of the Royal Horticultural Society, appears to have realized the dream of the lover of hardy exotic flowers, and by his knowledge of their requirements, no less than by his good fortune to have such a suitable situation to give them as that in which he has arranged his garden in a wood, he has succeeded in establishing a vast number of rare plants of other countries, and so far rendering them at home that they not only exhibit their greatest beauty in uncurbed luxuriance, but testify their appreciation of the arrangements made for their comfort by coming up from seeds in some cases by the thousand, and in vigor quite equal to that which they would exhibit in their native American woods, Swiss mountains or Japan swamps or plains. Thus in that lovely sylvan spot at Oakwood, beneath the Scotch firs and oaks or on the shady banks, we observed thousands of young lilies, *Iris Kämpferi*, rhododendrons and other plants coming up in all directions, and even the rare Indian poppies or meconopsis preparing a goodly supply of successors, while the *Osmunda cinnamomea* and other ferns appear in countless numbers. This luxuriance of the young gives the best evidence of the happiness of the more mature, for had not care been taken to plant in proper soil and situation, the second generation would never have appeared even where the old plants continued to struggle on.

"The Oakwood garden at Wisley is a wood in which Mr. Wilson has planted, in suitable situations, thousands of lilies and hardy, or presumably hardy, plants, either in the wood, by the side of the lake, or on the slopes, which are laid out in many mounds and rockeries, or enclosed in various ways by shelters of trees, rhododendrons and other suitable plants. Immediately on arriving at that portion of the wood that commands a view of the garden, the success of it is felt, by the fine and unusual appearance which its gaily-colored surface presents. Let us from the entrance pass the eye over the ground and note a few of the great and gorgeously-flowered bushes which attract notice. We will then make the tour of inspection and note a few of the more beautiful things at present in flower ; more we cannot do, for the variety is so bewildering, and each month brings an entirely new set of beauties.

"First, then, at the gate the eye is greeted by great bushes of the double-white and double-pink bramble, by the glowing scarlet sprays of the *Tropæolum speciosum* rambling over the hedge, and the rare and pretty *Clematis campanulata*, with patches of the white anemone, Hon-orine Jobert, covering many yards ; further on are great

bushes of the mauve and white Japanese *Rosa rugosa*, some in flower and some no less beautiful with their large bunches of scarlet fruits and their numerous progeny coming up around them. Away to the right the eye lights on large clumps of the scarlet and yellow *Lilium superbum* and the golden-rayed lily of Japan, eight feet or nine feet in height, while showy plants, which may be seen in the distance, are the yellow *Harpalum rigidum*, taller than a man, the golden *Coreopsis lanceolata*, the fine cut-leaved *Bocconia cordata*, *Saponaria officinalis* fl. pl., with double pink flowers, the large bushes of rose and white cistus, the white, pink and red phloxes, the rich blue *Salvia patens*, the drooping crimson and sulphur *Leycesteria formosa*, the handsome mauve *Rubus spectabilis*, the great white heads of the *Hydrangea paniculata*, and the golden bosses of the *Hypericum oblongifolium* and *H. aureum*. These, blending with the lesser flowers and stately foliage shrubs, form a picture not easily described or imagined.

"At the entrance, under the shade of the trees, are the fern rockeries, in which many rare species have grown into large specimens ; among the finest are the handsome *Hypolepis millefolia*, *Athyrium filix-fœmina pulcherrimum*, *A. f.-f. coronans*, *Allosorus crispus* (the parsley fern), *Osmunda spectabile*, *O. interrupta* and *Asplenium viride*. The New Zealand tree-fern, *Dicksonia antarctica*, too, has been successfully wintered at Wisley, and the North American climbing fern, *Lygodium palmatum*, has formed itself into a very fine specimen.

"Prominent among the many charming things in bloom among the beds and on the rockeries are *Fuchsia Riccartonii* and *F. pumila* ; *Gentiana ornata*, *G. asclepiadea*, mingled blue and white, as they sowed themselves ; *G. pneumonantha*, and other fine gentians ; Campanula G. F. Wilson, a pretty hybrid between *C. carpatica* and *C. pulla* ; *Plumbago Larpenæ* ; the crimson *Calandrinia umbellata* ; the white *Linum monogynum* ; the blue *Cyananthus lobatus*, like large violets ; *Abelia rupestris* ; a fine show of the various ericas, menziesias and andromedas ; and in a portion set aside for the purpose a great number of interesting things collected in Switzerland by Mr. Wilson, Jr., who is an able seconder of his father's efforts in his clever gardening operations. Among the great beds of lilies in bloom, beside the many hundreds of *L. auratum*, *L. speciosum* and other plentiful kinds, we were much attracted by the beauty of the *L. Scovitzianum*, yellow, dotted with crimson ; *L. Batemannia*, all pure reddish orange ; *L. tigrinum Leopoldii*, scarlet, dotted with crimson ; *L. tigrinum flore pleno*, a fine double variety ; *L. Leitchlinii*, citron yellow, dotted with black ; *L. Brownii*, large, white, tinged on the outside with purple ; *L. Krameri*, bluish-white ; *L. longiflorum albo-marginatum*, with white flowers and white-margined leaves ; *L. speciosum Kratzerii*, a fine fragrant white, and *L. giganteum*. These are blooming in the most luxuriant manner in many parts of the woodland garden.

"The bridge-spanned lake, which in its season is covered with the sweet Cape pond-weed, *Aponogeton distachyon*, is now embellished with the flowers of the white water lily, *Menyanthes trifoliata*, and some of the potamogetons; on its banks the Japan *Iris Kämpferi*, in many varieties, is quite at home, as well as the species of bamboos, *Crinum Powellii*, *C. capense*, New Zealand flax

collected by Mr. Scott Wilson, being planted near it, in the hope that the favorite situation may make like specimens of them.

"In the gorse shelters the gladioli are very showy, the plants of Sikkim rhododendrons and other plants being acclimatized in good order, and the huge specimen of camellia, Duchesse d'Orleans, twelve feet across, in fine



JAPAN ANEMONE.

(*Phormium tenax*), *Spiræa palmata*, and the many varieties of *Iris Germanica*; while in the marshy ground of the bog garden, the American *Sarracenia purpurea* and *S. flava*, the fly-trap (*Dionæa muscipula*), *Pinguicula hirtifolia* and other insect-trapping plants are quite at home; and the lovely gentianella, nearby, so strong that one truss of it recently produced 600 of its fine blue flowers, the white, variegated and other rare forms of it,

health, although not so well set with bloom this year as usual. The filmy fern, *Todea superba*, is in grand health, with just the protection of a glass to keep it clean and moist; and the bank of tea roses, capped by purple clematis, in unusual vigor, a condition which the tuberous begonias seem inclined to imitate.

"Leaving the fine garden at Oakwood we return to headquarters, at Heatherbank, and find innumerable ob-

jects of interest among the plantings in the Scotch fir wood which bounds it; notable is a provision made for quick-running plants, which when planted among others are apt to smother them; with these Mr. Wilson copes by allowing to each a separate mound some six feet or seven feet across, and most of which are now covered and perfectly beautiful. One is a mound of *Acæna Novæ Zealandica*, another of *Fragaria lucida*, a third of *Polygonium vacciniifolium*, a fourth of *Viola semper-florens*, and many others are clad with different acænas, vincas, potentillas, and, instead of causing dread that their luxuriance will be doing mischief, they are very fine objects.

"Another noteworthy innovation is Mr. Wilson's method of growing such things as osmanthus, euonymus, azalea, ledum, pernettyas, skimmias, &c., among roughly formed roeteries, in which they thrive much better than in beds. In the wood is a repetition of the grand culture of lilies found at Wisley, and around on every hand is a great profusion of bright flowers on the many species of herbaceous perennial grown. The whole of the garden, except the portion immediately around the house, is kept as near to nature as possible, and although unlimited judgment and labor must be expended on it, as little of the evidence of gardening as possible is allowed to appear in a formal manner; patterns and regularly shaped beds in all cases being avoided, and such care exercised in planting that plants soon take up their quarters as though in a wild state.

"The glass department at Heatherbank is as interesting as the outdoor, a great number of rare plants, including bulbs and orchids, being there grown. Among the orchids in bloom are some good specimens of *Cymbidium elegans*, *Maxillaria venusta*, *Odontoglossum phalaenopsis*, *Cypripedium niveum*, *Govenia fasciata*, *Pteristeria elata* (the dove plant), *masdevallias*, &c. In the

conservatories are a bright display of tuberous begonias, pelargoniums and fuchsias, with *Tacsonia Exoniensis* and mingled red and white lapagerias on the roof, the white one especially being found to do best in the very coldest house. In the other houses, all of which are kept cool, we noted among many other objects of interest some grand montbretias in flower, viz., *M. Pottsii*, scarlet; *M. roseum*, rose; *M. Gerbe d'Or*, yellow; *M. bouquet parfait*, yellow, with scarlet tips; *M. Etoile de Feu*, scarlet; these all do well in an unheated house, and the first two are even better in the open ground at Wisley. Other fine plants are *Cypripedium spectabile*, which has borne over twenty spikes; *Diospyros Kaki* (the Japanese persimmon), covered with fruits soon to turn scarlet; a blue lactuca from the Himalayas, altitude 7,000 to 9,000 feet; a fine specimen of bog myrtle growing in the rock in the tank with other good plants, and the dark-flowered *Apios tuberosa*, which is also grown in the open at Oakwood. The plums and pears in pots we do not ever remember having seen equal to those at Heatherbank, which, although only grown in twelve-inch or fourteen-inch pots, have large heads covered with from fifty to one hundred fruits of unusual size and quality, the whole collection of finely-fruited bushes being a sight worth seeing. Of course it is needless to say that a judicious course of feeding when making growth and fruit is pursued with these.

"As the last object we can now note in Mr. Wilson's novel garden, we must mention a novel cheap house formed by placing a four-light span frame over a pit dug to form the body of the house, a portion being left for staging; to this a sloping walk is cut as an entrance, and many rare bulbs, lilies, filmy ferns, terrestrial and other orchids, may be grown in such a contrivance placed in a sheltered spot, better than in one of the hot-houses in which they are often placed."

THE ANEMONE.

WE cannot understand why, in the search for beautiful flowers for the garden, greenhouse or conservatory, the anemones are lost sight of, when they have so many points of usefulness and attraction. The genus is a large and varied one, containing more than seventy-five species, very widely distributed. The species are all showy flowering plants; *A. coronaria* and *A. hortensis* are well-known florists' flowers, always listed in seedsmen's catalogues, but rarely sold in this country—at least not in proportion to their rare beauty of form and color. They are valued for their hardy nature and because they will flower in almost any season if the roots are kept out of the ground for a time and then are planted according to the season in which you desire the blossoms. A peculiar characteristic of the anemone is that the roots may remain out of ground, perfectly dry, for two years without injury; consequently they are always ready for planting, and in the greenhouse they may be had in bloom at all seasons of the year.

The anemone is by no means a greenhouse flower, as it blooms freely in the window-garden, and some of the species are in flower in the open air from May until October. Among the first flowers of spring, they are ever welcome; the native species bid the spring good morning, leaving the Japan species to say adieu to the other autumn flowers. While our own woods and fields cannot give us the showy flowers of Southern Europe, the indigenous species are none the less beautiful. The wood anemone (*A. nemorosa*) is one of the earliest flowers of May, and in congenial situations fairly carpets the woods with its delicate foliage spangled with flowers of the most delicate tints and pleasing forms. This plant is of easy culture, and if grown in rich leaf-mould, in a shaded situation, will come up in the garden year after year, without any attention after the first planting. The only care necessary is not to allow it to dry up. Double flowers of this species are rare, but close observation will occasionally detect them amid luxuriant growths.



ANEMONE FULGENS.

Another of the vernal species that is well worth a place in the garden is *Anemone patens*, or *pulsatilla*, commonly known as "Pasque flower." It is indigenous to some parts of the Western prairies, and is common in Europe. The flower is a dull, whitish purple, occasionally deeper purple, large, spreading and very showy. Its mode of growth on a short stem is rather against it, but after flowering, the stem lengthens, and the long tails of seed are often more ornamental than the flower. Thomas Meehan, Esq., who has a sincere affection for all our native plants, speaks of this species as follows: "The poets seem to have united in associating the idea of expectation with the anemone; not, however, from anything suggestive in the flower itself, but rather from the circumstances of its mythological history. The flower is too transitory a character to be considered the symbol of expectation, which should rather hope on to the last. Instead of being enduring and constant, our flower soon drops its petals. Its true character is better expressed in the following lines:

There is a power, a presence, in the woods,
A viewless Being, that with life and love
Informs the reverential solitude.
The rich air knows it, and the mossy sod,
Thou, Thou art there, my God!
The silence and the sound
In the low places breathe alike of Thee;
The temple twilight of the gloom profound,
The dew-cup of the frail anemone!

"The *Anemone patens* is, indeed, among the frailest of flowers, but it is not often found in the 'reverential solitude' of lonely woods. It seems to prefer more exposed situations, and the writer of this never observed in it any nearer approach to a wood-loving habit than the fact that it grows under the scattered pine trees of the Rocky Mountains."

There are many other species indigenous to this country, many of which are truly beautiful, if for nothing else than their sweet simplicity, which is, after all, the highest type of true beauty. Of these *A. Pennsylvanica* is the most showy, and is a beautiful garden plant, succeeding in any good garden soil and always giving a profusion of bloom. Closely allied to, and, in fact, only a sub-genus of the anemone, is the hepatica, commonly called "liver-leaf" or "squirrel-cups," a flower which challenges the epigæa (trailing arbutus) to bloom first in the spring. This in the single wild state is very showy, and well worth cultivating; and in the double varieties it is one of the most showy of our spring flowers.

A. Japonica, a most useful, hardy, herbaceous plant, was introduced from Japan in 1844, and is described in the *Garden* as follows: "*A. Japonica* is undoubtedly the finest of the tall-growing anemones. It is a native of damp woods on a mountain called Kifune, in the neighborhood of Miaho, Japan, and was first introduced to this country by Fortune. We have not heard of any attempts having been made to naturalize it in our wild gardens, but if started well and left undisturbed we see no reason why it should not become as much at home as any of our native varieties."

We think it does better here than in English gardens, perhaps from the fact of the dryness of our climate. It is an autumn bloomer and seldom expands its flowers before the first of October. The flowers of the species are pinkish, or rather purplish red, very large, but somewhat loose in appearance. In the garden they produce a fine effect and will stand considerable frost without injury. Of this (*A. Japonica*) there is a variety, Honorable Jobert, which is unequalled in beauty by any garden plant. The flowers are white, large, regular and even, with a clear yellow centre; it is of a taller growth than the species,



DOUBLE ANEMONES.



CHRYSANTHEMUM-FLOWERED ANEMONE.

and for a mass in the flower-garden is unsurpassed for autumn decoration. The foliage is very ornamental and the flowers retain their beauty far into the autumn.

The anemone listed in bulb catalogues, and the one that has attained the dignity of a florists' flower, is *A. coronaria* and its hybrids. The flowers are very variable in color, being blue, red, pink, white, scarlet, purple and striped, and of both double and single forms. The roots are small, knobby tubers, of most unpromising appearance. They are annually imported in limited quantities from Holland by our seedsmen, and should be planted as soon as possible after their arrival, either in pots for the window-garden or in frames for out-of-door bloom. None of the varieties will survive the winter in the open ground, but do well if covered with a frame.

The bed for these tubers should be dug very deep, and

the soil made very rich, a good sandy loam being preferable; raise the bed a foot above the level of the ground to give good drainage. Plant the tubers in drills about two inches deep and four inches apart, setting each one in sharp sand to prevent rotting.

As the winter approaches put the frame over the bed, fill in with dry leaves, draw on the sash and leave all until April. Early in April remove the leaves, give light and plenty of air in good weather, and, if the soil becomes dry, water copiously after the plants appear above ground. The flowers will come out in May or early in June. After bloom is over withhold all water, and when the foliage has withered take up the tubers, and keep them in a dry place until the time for planting comes round again. The same tubers may be planted year after year.

Anemone fulgens, which we illustrate, is one of the finest forms of the genus. Its color is of the most intense and dazzling scarlet that it is possible to conceive. As it is one of the earliest flowers of the year, and so exceedingly brilliant withal, it deserves a place in every garden. The double-flowered types, or French anemones, have something of the appearance in form of a small, double hollyhock, with the same vivid colors of the single forms. The chrysanthemum-flowered form is another class of doubles of peculiar interest. Like all other classes of florists' flowers, variety names are given to such as have special merit, either for form, color or markings. This enhances the price of a given variety, without materially enhancing its value, as all are so beautiful that to select one more beautiful than another would be a difficult task. And, after all, it is the flower and not the name that we want; and, as we cannot get a poor one, the extra price the name entails might better be given for an extra quantity, or for extra care in cultivation.

We would say to all who love flowers, grow anemones; all the hardy species fill out to perfection some little, cosy nook in the garden, speaking affectionately to us in spring-time in wildwood language, and the more tender kinds will amply repay us for all the care required to grow them successfully by their cheerful, brilliant faces.

THE PROTECTIVE DEVICES OF PLANTS.

WITHIN comparatively few years students in science have learned to regard plant life and the arrangements of plant structures very differently from the teachings of a former age.

Most of us regard the world of plant life as a huge collection of beings which hover on the verge of existence, and at best only "vegetate," in place of living the free and active existence of the animal kingdom. This view of matters, however, would appear to, represent opinions which are in a state of rapid dissolution, if recent science as well as research of tolerably advanced age are to be trusted. Persons learned in things biological tell us that plants are by no means the stereotyped units they have been regarded by popular philosophy. We hear of plants

that feel, and of others which shrink on the slightest touch, and only expand their sensitive leaves after an interval has elapsed, and after the irritability of the living tissues has been appeased and mollified. We read of others which lay wary traps for insects, and which, imitating the rôle of the spider, capture, by aid of cunning contrivance, the unsuspecting fly. The Venus' fly-trap thus spreads open its leaf as an inviting surface for insect visitation, and closes its frond upon the winged visitor which has touched the sensitive hairs that rise from the plant's foliage. Nor is this the whole story of plant sensitiveness. The Venus' fly-trap does not capture insects for amusement, but for use, and as a part of the business of its proletariat. It eats, and, what is more, digests, the

fly it captures, and this by a process which, botanists tell us, closely resembles digestion in ourselves. In like manner the sundew of our bogs and marshes catches flies and eats them, the insect falling a victim to the snares and wiles of the plant. Then come the pitcher-plants, which visitors to Kew must have noticed, if for no other reason than that the leaves are marvelously modified to form hollow appendages which give to the plants their popular name. Within these "pitchers" flies and other insects in a state of decay are to be found. The pitcher itself is a kind of insect trap. Down into its slimy depth slips the fly which alights on its smooth and treacherous margin. With wings bedraggled and wet the insect creeps up from out its prison-house to the light of day, only to find that an array of spines pointing downward like a *chevaux-de-frise*, or a charge of fixed bayonets, impedes its course to the outer air. And so the fated insect falls back into the plant-pitcher, is speedily suffocated amid the fluid that receptacle contains, and adds its body to the decomposing material which previous victims have gone to provide. From this decaying solution, this literal insect soup, the pitcher-plant appears to draw much of its nutrition.

In respect, however, of the defences which they present against foes and enemies of various kinds, many plants exhibit devices of no less ingenious nature than those by means of which they capture their food. In either respect we see how the vegetable world becomes lifted out of the rut of a dull, half-and-half vitality into the region of active life and labor. When plants grow old, as has well been pointed out, they tend to protect themselves by reason of the density and hardness of the parts they develop. Contrariwise, the young parts of plants, illustrating structures of more tender nature, are often found to be specially defended by prickles, spines, thorns and like contrivances. What, for example, are we to say to the defences of the appropriately named "wait-a-bit" thorn of Ethiopia, which grows spines of immense length, utterly impenetrable by man or beast. The lion himself does not venture to tackle this formidable plant. Each spine, sharp as a bayonet, and as thick and effective, wounds and lacerates any living body which comes in contact with it. Nor does this curious plant stand alone in its special mode of defence. Grisebach, a noted botanical authority, tells us that all desert regions are distinguished by the high development of thorny defences in their plants. Nature in such a case seems to run to spines and prickles, as if imitating, in the merciless character of her plant life, the barren features of the surrounding land. There is, however, one noticeable point in connection with the growth of spiny defences in plants. The thorns, as a rule, do not grow above the level commonly reached by animals which might crop the leaves for food. Plant development is conducted evidently on lines of strict economy. "Waste not, want not" is a maxim which finds a frequent reflex in the ways of vitality. Nearly related to these bayonet-like defences are the stinging organs of plants. We have two species of nettles in this country which blister the skin, and cause pain and smarting when they are unwittingly touched. The urticating organs in the nettles and allied plants are simply modified hairs, similar in nature to those seen on most leaves. The

hair is hardened somewhat and pointed above. Below, there is a mass of cells forming a gland which secretes a fluid of acrid and poisonous nature. When we grasp our nettle we crush the hair, and suffer no bad effects; but when we touch it lightly the hair is driven downward, the sharp point is broken off in the skin, and the acrid fluid is forced upward into the tissues, and produces therein the well-known inflammatory effects. The "survival of the fittest" is in one sense a grim commentary on the success of an ill habit, if we are to judge from the plentifulness of the nettle tribe among ourselves. But abroad these plants would appear to flourish with equal vigor and persistence. What is to be thought of the giant nettle of New South Wales, which may grow to a height of a hundred and twenty or a hundred and forty feet, and which is provided with a poison fluid of proportionate virulence? Here the young leaves measure some twelve to fifteen inches in breadth. Another Indian species produces in man, when its leaves are bruised, and when the irritant fluid escapes, a copious flow of saliva, and gives likewise all the symptoms of a severe cold in the head, as well as fever and other untoward symptoms as the result of its sting. A Timor nettle is said to produce effects on man which last twelve months, so intense is the severity of its poison.

Passing over many cases of plant defence in which we find contrivances for repelling intruders on the vegetable domain, ranging in variety from glutinous secretions to bitter tastes and odors aromatic or disagreeable to birds and other plant visitors, we may find more noteworthy examples of curiosities in the way of the repulsion of enemies. Co-operation is a principle not unrepresented in plant existence. There is a parasitic plant of Sumatra, for instance, which has established singular relations with colonies of ants. The insects inhabit the tuber of the plant, which itself is a parasite on trees. Within this tuber the ants burrow to form their nests and winding passages. As these insects sting very severely, it becomes clear that animals will be chary of meddling with their plant post. An association of almost similar kind is seen in a well-known member of the acacia tribe. Here we find spines of large size borne on the stem and branches. Below, each of these thorns is hollowed out, and in the receptacle thus formed ants are found. There is not merely a leaning upon the insect for defence in such a case, but also a decided preparation for the comfort and habitation of the defenders in the shape of the hollow spines, and also in the form of a large gland which manufactures the nectar on which the ants subsist. In return for defence the plant offers board and lodging to the insects, and provides a free breakfast-table for their use. Since the days when a work on flowers and their unbidden guests was written, botanists have been enlarging our knowledge of the often quaint and marvelous ways in which plants, while inviting certain insects for purposes of fertilizing their flowers, protect themselves against invasion by other and undesirable insect guests. Ants are abhorred, so to speak, by the majority of plants. They steal the honey, but afford no benefit to the flowers in return. Hence plant nature protects itself in this sense against the ants, as in another sense it invites these in-

sects for protection. Thus, in the teasel there are cups at the bases of the leaves, filled with water, and presenting impassable barriers to ants which may try to ascend the stem. In the pineapple leaves a similar arrangement is found; sticky organs catch and kill ants, as in the "catch-fly;" and the willow has slippery stalks to its flowers, which try to defeat any acrobatic impulses with which ants may be attacked or impelled. Yet the insect is sometimes equal to the task of circumventing the defences of the plant. There is an Alpine variety of the monk's-hood which is fertilized by bumblebees. But one bee, instead of legitimately taking the honey from the

front of the flower, and of thus aiding the work of plant fertilization, actually bites a hole in the back of the flower and abstracts the honey, without in any sense benefiting the plant. There is, however, another variety of this flower, which, having a bitter and acrid taste, is left unsailed by these insect thieves. The whole topic is full of interest to every lover of nature, and the subject is none the less interesting because in so many ways it shows reflections of a prudence and wisdom that find their analogues in many of the contrivances wherewith man protects his own interests in the world of higher life.—*London Daily News*.

OCTOBER.

A CHARMÉD moment poised between perfection and decay,
The aftermath of yellowing green is touched with specks of gray.

The maple's gold and scarlet leaf hangs quivering in the sun,
As though it felt a throb of grief that summer days are done.

Along the way the tangled briars gleam with a ruddy glow;
October lights her festal fires 'neath treasures bending low;

And like a gorgeous, conquering queen, in some triumphal hour,
She scatters with a gracious mien the riches of her dower.

She hangs upon the clambering vine a robe of peerless dyes,
And bursting berries, red with wine, ripened 'neath golden skies.

In tawny-reds and russet-browns the forest trees are dressed;
And on their blazing crimson crowns she stamps her royal crest.

Where'er she goes, at her command, strange beauties burst to sight—
A waiting hush hangs o'er the land, rich with a mellow light.

Till far upon the mountain steep she spreads a mystic haze,
As if behind its veil to weep for her last perfect days.

—*Selected.*

AFTER THE GATHERING.

THE meeting of American florists at Philadelphia in August was a most extraordinary one, not only as regards numbers, which of itself was truly astonishing, but because of the interest taken in all which goes to develop horticultural taste. The seed sown in Chicago in 1884 brought forth a plant which was nourished and fed in Cincinnati in 1885, and under the kindly influences of the skilled florists of Philadelphia, it there bloomed in 1886, to the astonishment of all, even those who have had this infant plant in charge from the beginning.

The question that proposes itself to all who have watched the development of this society from the seedling to full growth and bloom is, What is the fruit to be? And this is an important question, as upon it depends the future of the society, its preservation and usefulness. Without it can be made useful it were better had it never been started. It must have a living soul, a vital, animating principle, some generic influence, from which specific good will evolve that will benefit all, but more particularly such as need help, those who intend making from

the business of a florist something more than a living. The society should have a higher object than to bring into more prominence those who have already, by patient industry and indomitable perseverance, built up a large and profitable business. It should be educational in character, benevolent in spirit and catholic in purpose. To benefit mankind is an ambition that puts to shame a simple desire to please. Thus far "a good time generally" has been about all the society has accomplished and about all it could accomplish in its infantile state. There has to be a period for play in every life, and societies are not exempt from the rule. That passed, active life commences; we must go to work, and the first thing to do is to lay out the garden in which the noble fruits of manhood are to be cultivated. Kindly interest in each other has already been given a prominent place in our field, and now for a still broader field for practical good. What is needed now is some adhesive principle, something that will bind the members together into a common purpose, that purpose being the general good.

The late president, Mr. Thorpe, in his annual message outlined a great deal of good work that should have been undertaken before the last convention adjourned, and we were surprised that his cabinet, the executive committee, did not formulate some plan of operation while there was so large an attendance, ready and anxious to follow any good leader. At this time we wish only to speak of one of his recommendations, hoping in the near future to discuss the others in as broad and liberal a manner as their excellence deserves. He said :

"I hope to see established on a sound basis yet another branch, in the shape of a mutual benevolent association, which shall be so trained as to afford shelter for those members who are overtaken by misfortune. This would be of incalculable good. Perhaps this is not the time to handle such an important question, but I think it will be well for us to ponder over it, as the sooner all good undertakings are begun the better for those concerned. Would it not be wise for us to appoint a committee to report as to the best methods of forming such an association at our next general meeting?"

Here is a door that opens into a wide field of usefulness, and the society should at once make it as broad as necessity requires. The Society of American Florists is composed of some of the best men and women in our country, and with such material great good can be accomplished. Very many of them are poor in money, but rich in character. We never knew a florist unwilling to assist another florist when necessary ; in fact, florists are too often generous to a fault. Now, what is wanted is a fund to which each member can contribute annually or periodically a small sum while able to work, which will entitle him to a given sum in case of sickness. This fund, being for the common good of the members, is common property, and each is entitled to a just share because he jointly contributed to it. In the event of a member's death an assessment of a few dollars each should be made and the sum given to the family. We all know how useful life insurance is, and here is an opportunity for doing far greater good, because it can be done far more cheaply and all can be benefited without age and other restrictions which insurance societies consider necessities. Since this subject has been agitated we have spoken to several members in regard to the advisability

of such a plan and all indorse it most heartily. Fully one-half of the members who have given their opinion say that they would pay most cheerfully an assessment, of say two dollars, upon the death of each member, but would have it upon record that in case of their own death no assessment for the benefit of their families should be levied. Should some such plan be adopted it would be the strongest aid to the preservation of the society. Each and every member's dues would be paid promptly and the society would know just what its membership is at all times. At present the number of members is the number in attendance at the annual meeting. Those who attended this year paid their two dollars and received their badge ; if they attend next year they will do the same.

Let us see how this works. At the meeting in Philadelphia there were probably 200 florists who will not, or cannot, attend the convention in Chicago next year. Very many cannot afford either time or money to do so. Under the present arrangement there is no inducement for them to pay their dues, because when they can attend a convention, even though it may not be in five years, they will still be members, entitled to all the privileges of the society by paying their two dollars.

Of course the convention next year will be just as large, if not larger, than was that of this year, but it will be composed of such florists as live near Chicago, the same as was the case at Philadelphia. Now, what is wanted is an interest in the society other than that, or rather in addition to the social pleasures which the society affords.

We hope and trust the executive board will, in good time, have prepared some well-organized plan to submit to the next annual meeting, one that will be so well perfected that its adoption will be secured without necessity for argument or delay. We fully believe that with some inducement to work there will be such an attendance at Chicago next year as never before gathered together in the name of a florists' convention. We are also fully convinced, from what we saw and heard at Philadelphia, that unless there is some good object to be attained, the convention will be conspicuous because of the absence of some of the society's most distinguished members. Let us hope for a large convention, because of its real usefulness.

AN HOUR IN THE TROPICS.

TO the lovers of tropic wealth in plants and flowers, the prospect of a trip through their own natural domain is most alluring, and doubly so when we can step from our own brisk autumn air into the heavy perfume-laden atmosphere of Borneo or Ceylon, and that without the aid of Aladdin's lamp or enchanted carpet. We have only to enter the portals of some great hothouse, and, presto ! the tropic world is before us. Palms and orchids give us an East Indian jungle in miniature, without the decided disadvantage of the innumerable creeping things, more or less noxious, that are apt to make a tropic ramble anything but desirable.

Suppose we enter an East Indian house. We are first impressed by the wonderful pitcher plants, nepenthes, a never-failing source of wonder and admiration to botanist and amateur alike. They are indeed an oddity, with their long leaves bearing pendant pitchers, some long and slender as a classic amphora, others plump and bronze-hued, like the little brown jug of popular song. And their oddity of form is not their only wonder. You will notice that each pitcher possesses a lid. Now, before this has attained its full growth, the lid is tightly closed ; yet, if you shake the pitcher, you will find that it contains some fluid, evidently secreted by the plant ; the secretion and

use of this fluid has been agitating our botanists for years, without any very definite solution. That it attracts insects is undoubted, and also that it acts as a trap for the unwary little wretches; but whether the plant catches flies for its dinner, like a botanical Blunderbore, or whether it catches them just for fun, is a mystery I am unable to fathom. You will notice on tasting the nepenthes liquor that it has a rather undecided, but still pleasant, sweetish flavor, but it does not act on insects like ordinary, innocent sugar and water. You may watch some portly, aldermanic blue-bottle briskly walk through the family entrance of one of these botanical bar-rooms to where the pellucid fluid lies, in apparently innocuous desuetude. He takes a few sips and leaves, soon, however, to return. After a second visit he becomes reckless, declares he could whip a hornet in a fair fight, and swaggers around until, overcome by the seductive fluid, he meets a fate similar to that English prince who was drowned in a butt of Malmsey.

Apparently some nepenthes secrete a much stronger fluid than others; at least, we should judge so from their class of patrons. Thus, one devotes its energies to the capture of gnats and another to full-grown blue-bottles. We were recently informed of a variety capable of dining on bullfrogs, rather a disturbing piece of information. It would be well enough if the depraved plant would stop at bullfrogs, or even mosquitoes, but how are we to be sure that it will not some day make a ferocious attack on its grower, or demand a steady diet of botanist *au naturel*? We may yet have to chronicle the mysterious disappearance of some botanist addicted to the culture of carnivorous plants, to discover when too late that he has fallen a victim to the cannibalistic nepenthes.

We are told by an expert that the intoxicating qualities of the nepenthes liquor vary greatly in intensity; one may be likened to lager beer in effect, while another resembles that extract of *Poa pratensis* regarded as the original nectar by the natives of Kentucky. Judging from this standpoint a conscientious blue-ribbon gardener could scarcely indulge in the plant.

By the way, Edgar Allan Poe shows botanical knowledge when he requests the raven to

Quaff, O quaff the kind nepenthe,

though we have no ground for supposing nepenthe to have been the poet's favorite beverage.

These pitcher plants are all natives of swampy ground in the Indian Archipelago. It is a notable fact that all the carnivorous, or so-called carnivorous, plants are natives of swampy ground. Our own pitcher plants (*Sarracenia*) and our native sundew and Venus' fly-trap are familiar examples. One hour in the tropics will show us many a plant oddity besides the nepenthe, though none more wonderful. Here is the Dieffenbachia, or dumb cane, an arad of noble growth. This genus is a native of tropical America, and supplies us with some strikingly handsome foliage plants, with beautifully variegated leaves. This plant is very poisonous, affecting the nerve centres in such a manner as to totally paralyze the tongue for a week, even if it does not result fatally. Hence its name, "dumb cane." Humboldt, who was the first white man

to experiment with it, grimly says it is considered an unfailing cure for stammering. An American botanist has sarcastically christened it "mother-in-law plant." According to popular report, it is one of the substances used by the South American Indians in poisoning their arrows. It is a noticeable fact that most arads possess the poisonous quality so prominent in the Dieffenbachia, though it is not always so powerful. The popular calla is very acrid when fresh, though this quality is dissipated by drying or cooking, and most country-bred youngsters have had painful experience of the biting qualities of the Indian turnip, tasting like a combination of cambric needles and cayenne pepper.

Alocasia zebrina is another beautiful arad from the Philippine Islands; it has fine arrow-shaped leaves, of rich dark green, borne on stout foot-stalks of pale green, mottled zebra-fashion in a darker color. I know that this plant possesses somewhat the same flavor as its South American cousin, for once, when I was young and botanically innocent, I ate a mouthful of the leaf-stalk, and I had to eat bird's-eye peppers to remove the lingering flavor.

In a house of tropical plants, apart from orchids, we should depend for our effects more on foliage than on flowers. Palms and tree-ferns are always most effective, while the dark rich green they usually display is lightened by golden-leaved crotons. These are very beautiful plants, lightening up a house wonderfully.

C. angustifolius, when well grown, looks like a fountain of gold, with its drooping, ribbon-like leaves. Other varieties show beautiful variegated effects in red and purplish green, and they have the merit of making a fine show in the sub-tropical garden during the summer. There are some superb beds of these plants in the grounds at Girard College, giving a South Sea Island suggestiveness in the midst of the Quaker City.

The bamboo is another graceful foliage plant. A fine specimen is in a tangle of palms at Horticultural Hall, in Philadelphia. At Chatsworth, the Duke of Devonshire's show place, there is an archway composed of bamboo; the arch itself is about thirty feet high, but some of the shoots are double that length. The bamboo is remarkable for its rapidity of growth; at Chatsworth it has been known to grow *two feet* in twenty-four hours. I have always imagined that Jack's magic beanstalk was in reality a bamboo. There is a very graceful variegated bamboo, but this does not attain the size of the preceding.

Some of the banana family are very showy stove plants, apart from the beauty of the leaves, as they produce very brilliant flowers. The variety of stove palms seems endless, though every grower does not command sufficient space to let them grow. One requires a good deal of extra room to accommodate their names, too; take, for example, the thief palm, known in polite circles as *Phænicothorium seychellarum*. It looks rather like an Aztec swear-word, but there are more elaborate names yet in Paxton's botanical dictionary. But to those who say botanical names are difficult I respectfully submit the following, the genuine name of a Welsh village, given me by a native. Here it is: Llanfairpwllgynyllgerchwim-pwllgertropwllgogerpwlldisiliogogof. E. L. TAPLIN.

WILD ROSES.

LITTLE is known of the origin of our garden roses by those who cultivate or those who plant them. And yet the wild roses which bloom all over the Northern hemisphere are all beautiful, most of them are exquisitely fragrant, and many of them have a simple grace of form that none of the garden hybrids can equal. The garden rose as a shrub is too often stiff and ungraceful, while the foliage and habit of some of the untamed species are sufficiently attractive to make them worth growing if they never showed a flower. The wild rose is usually found on dry soils, though a few species inhabit swamps, and the climbing varieties are usually among bushes or hedgerows. In the warmer latitudes they are always white and generally single, although in Italy, Greece and Spain double varieties are found now and then, it is said, in the woods and fields. The genus, botanically, is in great confusion, and it is almost impossible to say where a variety ends or a species begins. The species I shall name are the most promising for cultivation, and, although no one expects or hopes that they will supersede the "improved" hybrids, still there is room for both. One charm of the natural species is that many of them are bright with fruit in autumn and all through the winter.

Rosa Kamschatica is a strong grower from the cold region which gives it its specific name. It has bold foliage and a coarse stem, wearing a strong armor of defensive prickles. The flowers, which appear in July, are larger than those of *R. rugosa*, but of a paler pink. Its brilliant scarlet fruit make it a desirable ornament in large shrub-beries.

Rosa spinosissima is the old Scotch rose, a dwarf grower, with neat foliage and delicate flowers, varying from white and pink to yellow, which are succeeded by dark purple fruit. It comes from the north of Great Britain and the Scotch gardeners have raised many interesting varieties, double, semi-double and of almost every shade. It is one of the earliest to flower, coming hard after the Alpine rose.

Rosa lutea, the Austrian brier, is a native of the East, and is known through its offspring, the Austrian yellow and Harrison's yellow, a seedling said to have originated in America. We rarely see these early semi-double yellow roses, once so common in old gardens, and yet we rarely see anything more beautiful. The leaves of the species have a faint sweetbrier odor.

Rosa sulphurea, another yellow species, comes from the Himalayas, but is hard to grow. In a greenhouse its flowers open well, but out of doors there does not seem to be heat enough at its time of bloom, although that is late in June. I think it might do well farther South, in a warm, rich soil and an open, sunny situation.

Rosa rubiginosa is the sweetbrier of poetry, a native of Europe, but now often found wild in this country, where it has escaped from cultivation. Its neat pink flowers and red fruit are well known, as is the delightful

fragrance of its leaves, especially when set with dew. It attains a large size—will clamber to the top of a support thirty feet high and then flow downward in a cataract of long, streaming branches. There are several well-marked varieties, such as major, a semi-double kind, the clustered brier and others.

Rosa Alpina opens its light flowers in the latter part of May, and these give place to pear-shaped fruit, orange and red. Its branches are thornless. It is the parent of the old-fashioned Boursalt rose, now rarely seen, and of other varieties well worth growing, especially as pillar roses.

Rosa arvensis, the field rose of Europe, makes a rampant growth among the bushes. In England it runs twenty feet in a season. The flowers are of a pale rose color, and keep opening from May until August. The Ayrshire rose is a variety of this species, with pale pink double flowers. It grows rapidly but is somewhat tender here. There are other varieties which I have not tried, but which are commended highly.

Rosa multiflora.—The plant received from Japan under this name is a beautiful shrub, flowering in clusters of pure white, which resemble strawberry blossoms very closely. As many as a hundred flowers appear in one cluster. One plant kept last winter in an eight-inch pot had 3,000 flowers. To my thinking it is one of the finest additions to our gardens in the way of a single rose. If worked up it might become the parent of a new section of half-climbing hardy roses. It is also admirable stock on which to work hybrids for forcing, as the plants on exhibition at the Massachusetts horticultural shows have proved. This species (or variety) differs widely from the so-called "multiflora" which we grew some years since, and from which "Seven Sisters" sprang. It differs widely, too, from the so-called "multiflora" received from the Himalayas. I am half inclined to consider it the species described by De Candolle as *R. fragariaeflora*. The fruit is a small, reddish berry, but it comes in great clusters which remain all winter on their stems. It is one of the few species whose seed germinates the first season after sowing.

Rosa setigera, the Michigan or prairie rose, is certainly a more attractive plant than many of the hybrids derived from it. Its vigorous growth and abundant bloom after the garden roses have faded make it most effective in a shrubbery. The deep rose-color of its bloom slowly fades to a pale pink, so that the plant appears to bear flower clusters of several distinct varieties at once. Baltimore Belle, Mrs. Hovey, Queen of Prairies and other pillar roses have been derived from this.

Rosa lucida, our dwarf wild rose, takes its name from the shining upper surface of its leaflets, and is very variable in flower and foliage. The color of the bloom may be nearly white, and it ranges from this to a deep rose-color. From Massachusetts to Florida it flourishes on

every kind of soil, from the dryest to the edges of swamps. The flowers keep opening from May till July, while the showy fruit hangs on till well into winter, and the autumn color of its foliage in large masses is striking. Its low, half-trailing habit makes it an admirable shrub for covering unsightly banks, and its method of spreading by underground shoots or stolons adds to its value for this purpose. It is easily renewed by cutting over once in three years.

Rosa nitida, the narrow-leaved, shining rose, is not so common as the former one, and is usually found in damper soil. Its flowers and fruit are both more showy. It is sometimes found in gardens near Boston under the name of the Jackson rose, and few single roses give more satisfaction when cultivated.

Rosa foliolosa comes from Texas, and is among the latest species to bloom. The pale lemon-colored flowers begin to open in July and continue until September. It is seldom seen in cultivation, but its fine, distinct foliage and apparent hardiness commend it. Its features are all so marked that the hybridizers ought to experiment with it. Its blood, mingled with that of other types, might produce a new and worthy race.

Rosa blanda, the early wild rose, is not common here in Massachusetts, but is more abundant to the northward. It is a modest plant, the least striking of our native species, but yet well worth a place in shrubberies.

Its variety, *scopularis*, from the Rocky Mountains, is most interesting. The flowers are pale and are followed by large pear-shaped hips, which ripen in September and are more beautiful than the fruit of any other American rose. Our plants are from seed sent by the late Dr. Engelmann and I do not know that this rose is in cultivation outside of the arboretum.

Rosa Carolina, the swamp rose, is one of the strongest growers among our native species, often reaching a height of seven or eight feet, with stems one or two inches and even more in diameter. It flowers from June till September, and the globular hip is brightly colored. Although a native of wet places, it does well in ordinary garden soil, although to do its best it needs much moisture. This is the stock upon which we graft many of the hybrids that come from Germany. One reason why these roses do not flourish like those on the Manetti stock is that this swamp rose needs to be brought on slowly, and its roots need abundant water while growing.

Rosa Arkansana is very desirable for the brilliant scarlet of its fruit. It is a neat shrub, two or three feet high, flowering well in clusters during June.

Rosa Fendleri comes from the Pacific region and is conspicuous for its early bloom, the flowers opening in the middle of May. This habit, with its bright red and abundant fruit, will make it a general favorite in cultivation when once introduced.—*Arnold Arboretum*.

EVANESCENCE.

CLOSE by a little murmuring stream
A delicate harebell grew,
And, in the waters, it caught a gleam
Of its fairy form of blue.

Over its face came a glow of pride,
As it gazed with a shade of scorn,
On its own green leaves, thro' which there sighed
The softest breeze of morn.

"Oh! why, thou leaf, that growth so low,
So dull in thy summer attire,
Doth my form such glorious color show
Such grace, for all to admire?"

"Beauty alone is vain, it is said,
And soon will vanish away;"
And the leaflet ceased and bowed its head,
Content in its place to stay.

"Oh! tell me not, thou poor, plain thing,
That my bonnie bells of blue
Shall ever cease their graceful swing,
Or lose their azure hue.

The livelong summer I bow and bend,
And bask in the sunbeam's light,
And the wondrous sapphire sky doth lend
Its glow to my petals bright.

So I bud and blossom in fairy grace,
And fear no coming ill,"
And the harebell bent its conscious head
To the little laughing rill.

But One who knoweth the sparrow's fall
Hath noted the fragile flower,
And marked the bounds of its tiny life,
Its brief and beautiful hour.

* * * *

The leaflet, bathed in the morning dew,
Hath waked in the golden light,
But the dainty thing that above it grew
Hath gone in the silent night.

Low on the bank lay the withered bell,
Down by the brooklet's side;
A sportive zephyr, adown the dell,
Came singing in airy pride.

It caught the petals in frolicsome play;
It whirled them around in glee;
At last on the waters they floated away
Afar to the limitless sea.

—MRS. MARY E. SHARPE.

ABOUT FERNS AND FERNERIES.

FERNS constitute the highest order of cryptogamous plants, forming a natural group distinguished for beauty and elegance, and much cultivated for ornament. In the earlier geological ages they formed a most important part of the vegetation, as is plainly seen in the coal-fields, where numerous fronds and stems are preserved; but from the general absence of fructification on these remains it is impossible in most cases to distinguish the species. The species of ferns at present described are 2,235, although some botanists make the number above 3,000. This includes, of course, the magnificent tree-ferns of the East Indies and the South Pacific Islands.

Although the tropics furnish us with the largest and most luxuriant varieties of ferns, they are a prominent feature in the vegetation of northern latitudes. In Great Britain they comprise one-thirty-fifth of the vegetation and in the United States about one-fortieth. Some very elegant and ornamental varieties grow in the Northern States, especially the *Osmundaceæ*, *Scolopendrium officinarum* and the maiden-hair, *Adiantum pedatum*. To utilitarian eyes they present no remarkable features of form or structure, being simply "brakes" to the farmer and his hired help. Yet some of these genera have a history that is royal, and a close examination will reveal in any of them a delicate beauty of structure that is alike wonderful and fascinating.

The older botanists, starting from the study of flowering plants, endeavored to recognize in all other cases the same characteristic points of structure. Arguing thus from analogy they never entertained a doubt that ferns were provided with true seed. The old herbalist, Gerarde (1545-1608), remarking the appearance of young plants of *Aspidium dilatatum* in the neighborhood of old ones, attributed this to the dissemination of seeds, "for I believe all plants have seeds in themselves to produce their kindes." No one could say anything definite, however, about the "seeds" of ferns, and they came to be regarded as highly mysterious. It was supposed that they were of an invisible sort, and by a transference of properties it came to be believed that the possessor of fern seed would be invisible too. Thus Shakespeare makes Chamberlaine say: "We have the receipt of fern seed, we walk invisible." Ray ridicules Tiagus for spreading linen cloths on the ground to catch the seeds of ferns on the eve of midsummer night, when, as Ray properly observed, "It would be indeed astonishing if any fell, seeing that they do not mature till the autumn."

Columna, in 1648, compared the fern frond to butcher's broom, and identified the fructification in the one case with the flowers in the other. Caesius came to his help, and having examined the *sori* of a polypody, "*telescopii adjumento*," detected what he supposed to be seeds, but which were probably only the spore cases. William Cole, 1669, was the first to microscopically observe the spores themselves, and Ray himself described the hygro-

scopic movements of the spore cases, which assist the dispersion of the spores. Morison appears to have been the first to put the matter to the test of actual experience in 1715. He sowed the spores of hart's tongue, and in due course, without, however, distinguishing clearly the two stages, raised plants from them.

Something would be lacking in our flora without these vigorous vegetative forms. How gracefully the ferns of the various families cover the rough, uneven surfaces of our pastures and hillsides. The highways are always skirted by great patches of them, and in the deep woods you will always find them carpeting the soil. Their rootlets find a clinging place in the crevices of rocks, and often the rough surfaces of huge granite boulders will present one mass of waving odoriferous emerald-like ivy. Other species cling to trees or, like the beautiful climbing fern (*lygodium*), run over bushes. Our Northern land would look altogether different without these elegant ornamental coverings, and yet, forsooth, they are nothing but "brakes," *i. e.*, weeds to be cut and gathered and stowed away in dusty old barns to litter the stalls of horses and cows.

Dear old Twamley sings the praises of ferns in some very pleasant lines:

The green and graceful fern,
How beautiful it is!
There's not a leaf in all the land
So wonderful I wis.

And all of early childhood—
Those past and blessed years
To which we ever wistfully
Look back through memory's tears—

The sports and fancies then my own,
Those fern leaves dear and wild,
Bring back to my delighted breast—
I am once more a child.

Ferns are among the first of the green things to appear in the spring, and some of them, like the rock or winter fern, stay green all the year round. And then there are so many different varieties, and they are so profuse, so prodigal in their growth! They grow not only in frequented places, but where people never go, in inaccessible swamps, in the deep passes of the silent hills, in forests which only wild creatures traverse, and under the shadow of gloomy mountains. The foxes, the hares and the eagles know their secret haunts.

Sufficient in nature's bounteous goodness, they grow up in quietness and freedom to fulfill their lives in content. They are a part of the earth's garniture of beauty and, humble as many of them are, still she cherishes them all alike. The stately osmunda is not more useful, is not more delicate or exquisite in shape or lines, than the common brake (*Pteris aquilina*).

When the days grow short and the white snow "covers

the landscape o'er," what is pleasanter in contrast than to find a retired spot in the woods or by the side of some rocky ledge where the winter fern throws up its green rhizomes—a spot of emerald amid a field of white? In this manner ferneries were suggested—glass cases in which not only the hardy rock fern, but numerous other varieties, may be preserved through the long winter months, "a thing of beauty and a joy forever." I have seen many handsome ferneries, and they are of all prices, from those costing one dollar to those costing one hundred dollars or more. A friend has one that is sufficiently large that cost sixteen dollars. The fern case is made of an octagonal box or frame of black walnut, two feet across, with four glass windows at the sides, and sufficiently deep to hold an earthen pan five inches deep, that has a hole in the bottom. In this pan is put two parts each of peat, loam, decayed leaf-mould, and one part of sand. Common garden earth will not answer. The addition of a few fragments of mortar or limestone

is advantageous. In this soil the ferns are placed and enough water given to thoroughly saturate the whole. When the plants have been in a few days the glass top, or what is better, a wooden cap pierced with holes, should be placed over them, and they will thrive in a sitting-room or parlor through the winter, requiring water but two or three times during the whole season. Care should be taken not to crowd the plants in the case and to place them so that they will touch the glass as little as possible.

Such a fern case is an elegant parlor ornament, and is no trouble to take care of after it is planted and watered. The ferns best suited for enclosing in a fernery of this description are: *Adiantum cuneatum*, *A. formosum*, *Pteris albo-lineata*, *Selaginella wilddenovi*, *Asplenium viride*, *Pteris scaberula*, *Onychium Japonicum*, and if the case is of large dimensions, *Pteris tremula*, *Pteris argyreia* and *Scolopendrium undulatum* will improve the collection.

F. M. COLBY.

ORLANDO'S VACATION.

ORLANDO'S digestive organs were not in their usual healthy condition and consequently he was somewhat depressed in spirits. He conceived the idea that he was a victim of Bright's disease, but our family physician assured him that he had not the slightest symptom of it. Then he decided that he was in consumption, but the same authority pronounced his lungs remarkably healthy and powerful organs. He fixed upon heart disease and assured me that he had no doubt that he should drop dead some not distant day, but the doctor asserted that his heart was liable to thump along in its present regular and phlegmatic way until he reached the eighties. Not being permitted to cherish any of these high-toned diseases, Orlando meekly subsided into biliousness, and the doctor, thinking it might as well be that as anything, ordered the agreeable remedy of rest and out-of-door exercise. Thus encouraged, Orlando declared that he needed and must have a year's rest from business and set about arranging his affairs accordingly. It was no difficult matter, for the firm of which he was senior partner were capable business men who could easily administer affairs themselves, and, indeed, showed a cheerful alacrity in the matter which seemed to me not very flattering to my husband's business or social qualities. Hitherto Orlando had restricted himself to two or three weeks each summer for rest and recreation, and our plans were made in advance, that not a day might be lost. Our place or places of resort were decided upon, our rooms engaged, our trunks packed and all things ready for a start on the first day. Now Orlando proposed to enjoy for a while the comforts and delights of home life before going away.

"Now that I'm my own man, Sarah Jane, we needn't get up in the morning until we choose," remarked Orlando as we retired to rest the night he left work. So I ordered breakfast to be ready at eight instead of seven

and fell asleep rejoicing in the prospect of a late nap the next morning. But Orlando, waking at the customary hour, thrashed and floundered uneasily about for ten or fifteen minutes, during which time he waked me nearly every minute to suggest that it surely must be time to get up. At last he did get up and begged me to hurry the breakfast. After breakfast the newspaper kept him quiet for an hour, and then he evinced great restlessness. He lay in the hammock on the piazza a few minutes, but the wind blew and he feared he should take cold; he went out to superintend the gardener who took care of our grounds, but the sun shone so hot that he feared sun-stroke and soon came back to the house, where he roamed uneasily from room to room. He discovered that the parlor windows needed to be washed, that there were three breaks and one smear on the library wall-paper, that the portières were full of dust, that the bust of Daniel Webster had been nicked by some irreverent handling, that the dining-room gas-fixtures were fly-specked and the chambers needed painting. In fact, he discovered during that one forenoon that our pretty home, which I had supposed to be in fair order and good repair, was scarcely habitable.

By way of climax, the valiant explorer strayed into the dining-room after the table was laid for dinner, and casting his keen eyes about, discovered that the maid had allowed the dust to accumulate over the doors and windows and on the top of the sideboard. It was but the work of a moment to get the long-handled feather duster and send the dust flying about the room and over the neatly-spread table, where it lay in fleecy rolls, accompanied by several insignificant spiders who might have lived and died in obscure corners had not Orlando routed them. As I appeared at one door and paused horror-struck at the clouds of dust that pervaded the room, and at the frightful condition of the table, and the astonished

servant bearing a savory roast appeared at the opposite door, Orlando complacently observed :

"I thought I would brush off a little of this dust while we were waiting for dinner, Sarah Jane."

"Just like a man!" I heard the girl mutter scornfully, as I lured Orlando from the room, assuring him that it would have to be cleaned up and the table newly set before we could eat dinner.

By giving him my whole time and exercising the utmost ingenuity, I succeeded in keeping him out of mischief during the afternoon. But although I dressed my prettiest, read to him, played and sang to him, talked to him, and allowed him to beat me at croquet, he declared at night that it had been the longest day of his life.

I felt that something must be done or his vacation would wear us out, so I proposed boating for the next day.

Orlando acceded with alacrity, so at an early hour we went down to the beautiful Charles River, near which was our home. To be sure I had never been in a boat but once, and had a mortal fear of water, but I was willing to sacrifice myself if Orlando would be happy. Orlando thought I had better get into the boat before he unfastened it, but being nervous with fright I lost my balance, and tumbled in head first, hitting my head against the thwarts and adding a picturesque bump to my forehead. Orlando had decided that I should steer while he rowed, and I succeeded tolerably well until we came to Weston Bridge. I did not quite see how we were to get safely through those small arches; but Orlando said if I kept my eyes on the middle of the arch we should go through all right. I obeyed implicitly; but, as he said nothing about steering, I dared not turn the rudder either way lest it should spoil the effect. Consequently we came violently against the side of the arch, smashing Orlando's hat, and jerking out of his mouth some very uncomplimentary, though brief, remarks. We went on a while longer without further mishap, but as we approached Lily Point we could not see where to go. On the right the water stretched out in shallow reaches, partially covered with patches of lilies, toward somebody's private boathouse. In front were the boats and landing of Lily Point, the bowling-alley and other accommodations for picnickers. At the left the river set in toward the land in several places for quite a distance, so we turned in this direction to explore the largest inlet. Orlando rowed on and on, but we could see only land before us, with no break where either the river or ourselves could get through.

"There's no use in going any farther in this direction," said Orlando. "Good land, Sarah Jane, where are you steering to?" for the boat had just run violently against a snag.

"I'm sure I don't know," I faltered.

"It might be conducive to our safety for you to find out," returned Orlando.

But as he turned the boat about, the stern went against the snag with such violence as to tear off the rudder. I was not sorry to be relieved from the task of steering, as I understood by Orlando's manner and words that he did not consider me particularly successful.

We made our way out of the inlet as best we could

and tried the next. This proved more shallow, and we soon ran aground, and there we stuck. Orlando labored in vain to push off by means of the oars, and at last, with the quietness born of desperation, he stripped off his shoes and stockings, rolled up the bottoms of his trousers and stepped into the water; but immediately gave a yell that could not be equaled except by the "untutored savage." To my alarmed inquiries, he explained that the bed of the placid Charles was paved with broken bottles and rusty tin cans. He pushed the boat into deep water and climbed in painfully, bringing with him an impediment in the shape of some disused crinoline which someone had rolled up and thrown into a watery grave. It had become entangled about Orlando's ankle, and one of the rusty, uncovered steels had penetrated the sole of his foot. Orlando pulled it out, but the wound was a painful one, and he was certain that he should die of lockjaw. I remembered having read somewhere that the smoke from burning cloth was a sure preventive of that terrible disease. I told Orlando so, and, borrowing his knife, I detached a liberal piece from the drapery of my cambric dress. Orlando produced a match, and I proceeded to smoke the wound. He insisted on having it done thoroughly, and on re-lighting the rag it blazed up unexpectedly and burned his foot almost to a blister before I had presence of mind enough to throw it over the boat's edge. There was no question now about his foot being thoroughly attended to, and I next stripped up my handkerchief and bandaged the suffering member; then I drew on the stocking, but the shoe would not go on, so Orlando was left in a condition similar to that of "My son John" in the nursery rhyme, who went to bed with "one shoe off and one shoe on."

While we were engaged in surgery the boat had drifted into a great patch of lilies, whose long stems, combined with the long, thick river grass, wound about the oars persistently and threatened to hold us captive. But after a wearying struggle, Orlando succeeded in getting into clear water again, and I now begged him to go home. He declared that he would not go until he had seen Waltham; he would not be foiled by the smooth-appearing Charles. We had explored all the largest expanses of water, but seemed no nearer to finding the outlet than at first. It seemed certain that we had lost the river. We were not lost; we knew perfectly well where we were and how to get home, but we had lost the river. At this juncture we discovered still farther away to the left a pair of lovers meandering along the bank under the trees. The young man was holding the girl's parasol carefully over her shade-hat, and bending tenderly toward her, and it occurred to me that, with the thick foliage, the shade-hat, the parasol and the lover, it would be a bold and powerful sunbeam that should succeed in reaching her.

Orlando rowed rapidly toward them, and when we were within speaking distance, I called out to the young man :

"Please, sir, will you tell us where is the river?"

Perhaps in my haste I did not word my question in the clearest possible manner, for the young man shouted, "Under you and all around you," while a distinct giggle from his sweetheart supplemented the reply.

Ignoring the disrespect of the reply, Orlando improved upon my question by calling out :

"Is this the road to Waltham?"

"No, the road is on dry land; we haven't laid one out on the water yet," was the reply, supplemented by another giggle.

"Come to the point, young man, if you please, and tell me the way to Waltham," said Orlando, with much dignity.

"Go to the point yourself, you idiot, and go around it if you want to see Waltham," roared the gentlemanly young fellow in a tone of contempt.

"Does he mean that we can go around Lily Point?" I asked.

"It sounds like that," replied Orlando, "but I couldn't see any signs of an outlet there; perhaps the point juts out in such a way as to hide it."

This proved to be the fact, for upon going back to the point we found that we could indeed go around it, and there, winding along in the direction of Waltham, was the lost Charles!

On we went until we came in sight of Waltham, when we ran against a snag and sprung a leak in the boat. The water came pouring in and soon submerged our feet, and still continued to rise. Orlando gave me his straw hat, with which to bale out the water, but it had been so broken by contact with Weston Bridge that the water ran out faster than I could dip it up. I took my own and tried to use that, but the trimming was heavy, and the added weight of the water soon broke it to pieces. I began to cry and tell Orlando that we should surely be drowned, but he assured me that he would die before any harm should come to me. I tried to feel comforted, but it was not easy to see how I should enjoy drowning any better after Orlando was dead than while he was alive.

The boat was now two-thirds full of water, and Orlando said he should prefer swimming outside the boat rather than in it, and throwing off his coat, plunged into the unruly Charles. Then he proposed that I should make a line of some portion of my clothing and let him tow me to the shore. I tore off the remaining drapery from my dress and the plaiting about the bottom and made a line, which Orlando tied about his waist and started to swim toward the shore. But the water-laden boat was heavy and he soon became exhausted, and, seeing some workmen near the river, I screamed for help. They put out in a boat to our rescue, and we were soon on shore in the suburbs of Waltham. But a pitiable-looking pair we were, wet and unhappy, bareheaded and ragged, and as to Orlando, lame and shoeless! We hired one of the workmen to go to Waltham station and procure us a closed carriage, and we were driven speedily to our home in Riverside.

Orlando said he had not done so hard a day's work before in his life.

The following day he declared his intention to stick to dry land and hired a horse and carriage for a drive into the country. We rode about three miles when the horse suddenly balked and refused to go another step. No efforts or stratagem could induce her to budge. For nearly an hour Orlando by turns coaxed, threatened and

whipped, but unavailingly. At last he succeeded in turning her around in hopes that she might be induced at least to travel homeward, but she would not stir again. Finally we both got out and Orlando took the horse by the bit and she consented to walk along, but as soon as either or both of us got into the carriage she would stop again. So we were obliged to walk, leading the brute which should have carried us, the whole three miles back to Riverside, to our infinite disgust and the amusement of the inhabitants of that rural suburb!

The next day Orlando thought we had better take an excursion on the Empire State, which was to go on the North Shore trip. As we should not have the management of that steamer he thought we might succeed in extracting some pleasure from the trip. But although the day was fine and the scenery delightful we saw and enjoyed nothing, for Orlando was seasick and very sure that he was about to die, and kept me beside his berth to receive his last farewell. He was better by the time we turned about to return, but a heavy fog settled down over us by that time and we were forced to proceed very slowly, with the whistle blowing almost continually and ourselves in constant terror of a possible collision. I did not understand why that whistle kept blowing, so I asked a very wise-looking gentleman, with gray hair and spectacles, and he assured me it was to blow the fog away so that they could see. But it was so very unsuccessful that I wondered they didn't give it up and try something else. By the time we got home, between the seasickness, the journey and the fright we were nearly worn out.

Orlando declared he wouldn't stand "that sort of thing" any longer. We would do the sensible thing and go to Nahant, as usual, take board in a quiet cottage and have a real rest. So to Nahant we went, and to a cottage somewhat remote from the more fashionable part of the town, and expected to enjoy ourselves. But the weather grew hot, and the butter was soft and the milk sour and the water lukewarm, and when we entered a protest we were assured that it could not be helped; the ice-cart did not come out so far until the season commenced. The daily paper was not brought around, because the season had not commenced, and Orlando had to walk two miles to find a barber, because the season had not commenced. Finding that the comforts of life could not be had until "the season," whatever that might be, had commenced, Orlando paid our bills, bought our return tickets, and we went home.

The morning after our return Orlando remarked that he would run into town and see how the firm was getting along without him. I made no objection, as I really needed a day of rest! He went, having been absent from the store just a week and a half.

He came home at tea-time, and while at the table remarked, carelessly: "They seemed very glad to see me at the store, Sarah Jane, and business is pretty brisk just now; it looks a little as if I might be needed. I guess I'd better take the rest of my vacation some other time."

But he hasn't yet. I don't believe he ever will. I think it would kill us both if he should!

MRS. SUSIE A. BISBEE.

HOME DECORATIONS.



CONE-FLOWER DESIGN FOR TOILET CUSHION. (FULL SIZE.)

Toilet Cushion.

THE cone-flower design for toilet cushion is given full size, and is to be worked with ribbosene and fine chenille on gendarme blue satin or plush. To transfer the design, place over it a sheet of tracing-paper, which can be bought for a trifle at any stationery store, and follow the outlines with a lead-pencil. Remove the thread from your sewing-machine and perforate the pattern by stitching carefully on all the lines; a coarse needle should be used and a long stitch. The tracing-paper is stiff as well as transparent, and the perforations thus made will easily admit the pounce powder. Any fine white powder will answer if it is carefully used, but the design should at once be lightly traced over with a very fine camel's-hair brush and any light-colored tube paint water-colors moistened with weak gum-arabic water will answer instead of the oil paint, else, as the powder does not adhere to the material, the pattern will become effaced before it can be worked.

The cone-flowers are worked with two shades of ribbosene, a light yellow and an orange, the latter being used for the short petals in each blossom. Most worsted needles can be threaded with the ribbosene, which is a tiny crimped ribbon woven loosely, and each petal is worked with one stitch, extending from tip to base. The centre of the flower is of brown chenille, worked in knot stitch. To make this, put the needle through the work exactly where you wish the knot to be; hold the chenille down with the thumb of the left hand, and twist the chenille, tightened by your thumb, twice around the needle; turn the needle quite around and insert it in the work just above the place where it was put in and draw it through, still holding down the chenille, until the knot is as tight as looks well. The leaves are worked with very fine chenille in three shades of green, the lightest for the tip; work in diagonal stitches from the midrib to the edge of the leaf. The stems and grasses are of two shades of olive green worked in ordinary stem-stitch.

The cushion on which this design was worked measured eight by twelve inches. A bow of satin ribbon corresponding in color with the satin was placed just at the end of the stems and a ribbosene ruche of the two shades of yellow trimmed the sides of the cushion. Low square toilet bottles should be covered with the satin similarly decorated with a portion of the design. The satin at the top of the bottles should be lined with gold color and fringed half an inch deep, and held to the neck of the bottle by a narrow ribbon. The bottles should be placed on small mats edged with the ribbosene ruche.

S. A. WRAY.

Daisy Aprons.

THESE exceedingly pretty aprons are made of one breadth of dotted mull, which has dots large enough for the daisy centres, and a sufficient distance apart to prevent the flowers from appearing crowded when the petals are worked. Dots the size of an old-fashioned three-cent piece and one inch and a half apart work very

nicely, but larger dots will look well if there is more space between them. Make a hem a quarter of a yard deep in one end of the mull, and around each dot within it outline daisy petals with blue wash silk. Work the dot for the centre with yellow silk in plain satin stitch. Work two or three daisies on a piece of the mull for a small pocket, and fasten it on one side of the apron with a bow of blue ribbon. Make a hem one inch and a half deep in the top of the apron, and run in blue satin ribbon for a belt.

S. A. WRAY.

Mantel Draperies for Bedrooms.

GRAY momie cloth makes a very pretty lambrequin for a bedroom mantel. The narrow width which can be purchased for 35 cents a yard is best for the purpose, and the length of the mantel-board will be the amount required. Trim off one of the selvedge edges and ravel to the depth of five inches. Tie groups of ten or twelve threads of this fringe in knots close to the cloth and between each little tassel thus made tie in one of the same number of silk threads, and if these tassels are of the different colors used in the embroidered design they have a very pretty effect. Above the fringe work in heavy outline a poppy design, which should be so arranged as to extend the whole length of the lambrequin. For the blossoms, crimson silk should be used; for the leaves and buds, dark green.

Instead of the fringe a pretty finish is a pointed lace crocheted with heavy gray linen thread which comes for such uses. The pattern for diamond edging given in the August FLORAL CABINET, 1885, is very suitable and easily made. Between each point of the lace and on each tip fasten a colored silk ball-tassel.

Another pretty mantel drapery has a straight valance of heavy white crash, the lower edge raveled and silk tassels added to the fringe, as already described. Above this an upright border design of cone-flowers, buttercups and red clovers is painted in natural colors, and the silk used in the fringe corresponds with these and appears in tassels of alternate colors. Above the crash a drapery of terra-cotta pongee-like material is caught up at the centre and the ends with full bows of wide satin ribbon, and the drapery hangs down at the ends a little longer than the crash valance. The design of clover, buttercups, &c., can be embroidered instead of painted, if preferred.

CYNTHIA.

Decorative Notes.

A HANDSOME scarf for a stand or a small table is of dark blue plush, with a border seven inches wide of dull gold satin across each end. On this border cherubs were outlined with dark brown etching silks and the entire portion of the satin which formed the background to the design covered in couching stitches with pale blue filoselle. These couching stitches were made by placing single threads of the filoselle (as they are composed of many small threads they are quite thick) in horizontal rows, and catching them to the material in half or quarter inch length with gold-colored sewing silk, and

these rows are about as far apart as the thickness of the filoselle. When finished it has the appearance of very regular darning, and gives an exceedingly pretty effect to the outlined design. Heavy silk tassels with bronzed metal tops are fastened to the bottom of the scarf as a finish to it.

Pretty comforters for cribs are made of white cheese-cloth. Torchon insertion is set in all around about three inches from the edge, and blue ribbon placed underneath the insertion. Wool is used for the wadding, as it is much lighter and warmer than cotton, and the comforter is tied with tiny bows of very narrow blue ribbon. Torchon lace, three inches wide, finishes the edges of the comforter.

Among new designs for mantel decorations is a lambrequin of crimson plush, made of a straight piece the length of the mantel and sixteen inches deep. In the centre of this strip a cut eight inches long is made from the lower edge toward the top. The left side is then gathered up as closely as possible and fastened to the plush above the cut and the gathers covered with a full satin bow of pale-green and crimson ribbons. The lower edge of this side of the lambrequin is finished with crimson and pale-green silk tassels. The plush on the other side of the cut is faced with pale-green satin and turned up as a revers on the drapery. On its broadest part a poppy design is embroidered with crimson silks in Kensington stitches. The effect of the whole arrangement is exceeding pretty.

Novelties in tidy and table scarfs have broad borders of a contrasting color, on which are appliquéd floral designs, fastened to the material with the heavy outline stitch, made by putting the needle in the work nearly upright instead of the slanting position required with the ordinary outline or stem-stitch; this gives the work an appearance resembling button-holing without a clearly defined edge. The silk used for this heavy outline should be the color of the material appliquéd. For instance, a dull-gold Japanese silk scarf has a deep border of pale-blue silk. On this is arranged a design of buttercups, the petals of which are formed of yellow satin outlined with yellow silk. The stems are of gold thread simply laid along the design and caught down with fine silk; the gold thread also edges the appliquéd leaves. Another scarf of deep-red silk is bordered with apple-green, on which sprays of poppies are appliquéd and worked as described above.

Covers for toilet cushions are made of linen lawn five inches square bordered with an inch-wide hem-stitch. In the centre of this square a small conventional design is worked in outline with filo floss. A cushion shown at the rooms of the Decorative Art Society is about eight inches square, covered with orange-colored satin and trimmed around the sides with a ruffle of Oriental lace. The design in the cover, worked with orange silk, is composed of three overlapping circles, each one containing a small floral design. The square linen cover is edged with a frill of Oriental lace and placed diagonally on the cushion. At each corner of the cushion the lace which edges the cover is caught up a trifle and fastened to the hem-stitched border; just underneath this full clusters of ribbon loops are tacked and these loops are made of very

narrow orange-colored feather-edge ribbon. This arrangement gives a very dainty appearance to the cushion and is exceedingly pleasing.

Although various kinds of standing-baskets have recently been described in the CABINET, an exceedingly pretty one now on exhibition at the Woman's Exchange is well worthy of notice. Three heavy bamboo canes form the standard, which is fastened together at the centre, where the canes are crossed, with a thin strip of rattan wound about and tacked in position. The bowl-shaped rush basket is hand-made and very strong and heavy. It is lined with deep purple satin and a box-pleating of satin ribbon of the same color trims the edge. A little triangular-shaped pin-cushion made of the same material as the lining and edged with a narrow ribbon plaiting is fastened on the inside, and just opposite this is a little pocket; both this and the cushion are decorated with a row of feather-stitch in lavender silk. A dainty little needle-case and an emery are suspended by a narrow ribbon from the basket rim and purple and lavender ribbons are drawn through the short, round handles of the basket and hang down at one side in a full bow of long loops.

C.

Pongee Curtains for Book-Shelves.

CURTAINS in front of standing or hanging book-shelves are not only a protection against dust but are also graceful decorations, and even book-cases with glass doors are often supplied with hangings of silk or other light materials. A correspondent of the *Weekly Press* gives the following suggestions:

"Pongee, with suitable decoration, makes a very pretty drapery for book-shelves, being light enough to be conveniently pushed aside. Cross stripes, that is, one across each end of the curtain, are still rather the most approved manner of ornament. The prettiest stripes are made by closely darning with silk a background from six to eight inches broad on the pongee, with a spray or vine upon it done in outline with another shade of silk. The outlined pattern may be left untouched or it may be delicately tinted with the brush in water-colors.

"The darning on the stripe should be so thick and close as to resemble another fabric laid upon the pongee, and the pattern should be outlined before the darning is done. Upon old-gold pongee a pale blue or dark brown darned stripe is very effective. For a set of corner shelves in a parlor light-blue pongee drapery is very pretty, with dark-blue darned stripes and a woodbine or maple decoration painted in fall colors.

"Plush ribbons and many kinds of brocaded ribbons, which are not very salable when in widths too narrow for the present fashion for sashes and too wide and stiff for millinery use, and therefore to be had at reduced prices, are very handsome for striping pongee curtains, and those ribbons in which gold and silver threads are freely interwoven are almost as elegant as embroidery would be, and much easier to apply. Below the lower stripe of metal-wrought ribbon it is a great improvement to sew a row of plush and gold ornaments."

HOUSEKEEPING.

Smoked Beef and Eggs.

Shave the beef very thin, having first trimmed it carefully; put it in a small frying-pan with a little cold water and let it freshen and simmer for a few minutes; then drain off the water, wipe the pan dry, butter it and put in the meat again. Beat the eggs, put them in with it and add a little salt and pepper. Stir constantly until well thickened, then turn out into a hot dish and serve immediately.

Cream Sago Pudding.

Soak three large tablespoonfuls of sago in water overnight. It will then require but three-quarters of an hour to prepare and cook it for dinner. In the morning put the sago into a quart of boiling milk and boil half an hour. Beat the yolks of four eggs with three-quarters of a cup of sugar, add to it three tablespoonfuls of grated coconut, stir it in and boil ten minutes longer. It is best to boil it over water, and the sago should have a quarter of a tablespoonful of salt added to it. When done pour into a pudding dish; beat the whites of the four eggs to a stiff froth, stir in three tablespoonfuls of fine sugar and spread over the top of the pudding; sprinkle lightly with coconut and set in the oven till it is a pale straw color.

Rice Pudding.

Two-thirds of a cup of rice. Wash it thoroughly in three waters, then put it into a pudding dish with three pints of milk, one cup of sugar, a little salt and a piece of butter half the size of an egg. Let it come to a boil, then bake one and one-half hours in a slow oven.

Candied Citron.

Peel and seed the citron; let it lay overnight in weak sugar water. Next morning drain through a colander, take one pound of granulated sugar to one pound of citron; put the sugar on and boil until quite a thick syrup is formed, then drop the citron in and cook slowly till it is very tender and clear; when done pour on plates and set in a warm place until dry, then sprinkle with granulated sugar and keep in glass jars.

Plain Pound-Cake.

One-half pound of butter, one pound of sugar, one pound of flour and ten eggs. Beat the yolks thoroughly, add the sugar and beat again. The whites should be beaten to a stiff froth and added to the yolks and sugar; the flour should be stirred in slowly last. Bake in a slow oven and give more time than if baking-powder was used.

Mountain Pound-Cake.

One pound of sugar, one pound of flour, one-half pound of butter, six eggs, three-fourths of a cup of sweet milk, one teaspoon of soda and two of cream of tartar. Sift the soda and cream of tartar with the flour three times; rub the butter and sugar to a cream, add the yolks well beaten, then the milk and the flour and last the whites beaten to a stiff froth.

Frost Cake.

Three-fourths of a cup of butter, two cups of fine sugar, one cup of corn starch, two cups of flour, one and one-half teaspoonfuls of baking-powder. Mix the corn starch, flour and baking-powder together and sift three times. Cream the butter and sugar, add the milk, then the flour and last the whites of seven eggs.

Snowflake Cake.

One cup of butter, three cups of powdered sugar, one gill (half cup) of sweet milk, four cups of flour and the whites of nine eggs. Mash fine enough soda to make one level teaspoonful, and add it to the flour; also, add three scant teaspoonfuls of cream of tartar. Sift three times. Cream the butter, add the sugar gradually, then the milk, next the flour, and, last, the whites of the eggs beaten to a stiff froth. If the cake seems too stiff to beat easily use part of the whites, putting in alternately a spoonful of flour and a little of the whites, but reserving the greater part to add after the flour is all in and thoroughly beaten, as it destroys the lightness of eggs to stir the cake much after they are in. Bake in layers and use any filling desired.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

Gladiolus and Lily Exhibition.—In the absence of a horticultural society, where seasonable flowers can be shown, in order that new varieties may be brought into notice, the seedsmen of New York have been obliged to make exhibitions in their own warerooms, lest all new varieties—novelties, as they are termed—should “waste their sweetness” in the nursery rows without giving the public an opportunity of indorsing the grower’s glowing description of the objects of his tender care.

Messrs. Peter Henderson & Co.’s annual exhibition, on September 1 and 4, inclusive, was largely attended, and the exhibits were superior to those of any former exhibition.

It was, unfortunately, a week too late to have the gladioli at their best, the weather having been excessively dry and hot. Notwithstanding these drawbacks the display was large, rich and varied. More than three hundred varieties were shown, embracing many of the best known varieties of former years, together with many new ones for the first time exhibited. Bayard Taylor had more admirers than any other variety, and it was by no means at its best—not what it would have been had the exhibition been two weeks earlier; but the spikes were long and the flowers of fair size, with as many as ten fully open. The color is very pleasing, a

clear canary yellow, with the lower divisions heavily blotched with crimson.

E. M. Stanton, another American seedling, is a superb variety and shared the honors justly given to African, one of the best, if not *the* best, of the dark-colored varieties. These two belong to the same class, the former being a little lighter of the two and the white on the lower sections better defined. Gen. Phil. Sheridan never showed to better advantage; its long spike of fire-red flowers with pure white stripes through each petal made it a conspicuous flower, contrasting finely with Martha Washington, a glorious yellow, and with Sea Foam, a magnificent pure white from Halleck & Thorpe's. Sea Foam is to the whites what Meyerbeer is to the reds, which is all the praise any one flower deserves. When the time arrives to send this variety out it will be eagerly sought. From the same growers was a vase of fine yellow gladiolus not yet named. It is much darker than Bayard Taylor, but a clear yellow with a well-arranged flower; this, too, is an acquisition which will be in demand as soon as the growers have sufficient stock to warrant them in offering it for sale. Henry D. Thoreau, the best of its class, a pure white ground heavily marked and striped with cherry rose, something on the order of Stella, was an attractive flower and can be safely classed with the best twelve. It was too late to see Lemoine's new hybrids at their best, as they are early flowering sorts, but in spite of that they attracted much attention.

The season, cool and wet, has, as a whole, been favorable for the gladiolus; many kinds have done better than ever before. We have never seen La Candeur do as well. In looking over a field of fully 20,000 they presented a mass of unbroken white; spikes two feet in length, with from six to eight well-opened flowers, this number being the rule rather than the exception. La Candeur should be planted late to show to the best advantage; in dry, hot weather, like all whites, it loses its purity and takes on deep blush—very pretty when wanted, but unwelcome when a white flower is desired. Many of the gladioli show to the best advantage when the bulbs are not planted before the 20th of July, and a large portion of the bulbs should be reserved for this purpose rather than to have them in flower during August, the most trying month of the year for the gladiolus.

There was much to see and admire in the exhibition besides the gladiolus. Dahlias, petunias, geraniums and many other flowers were out *en masse*. Of these we shall have something to say at another time. We cannot, however, omit mention of a table of lilies, "the fairest of the fair." In this collection, the speciosum section could not have been finer, and the best of these is *Kratzerii*, a pure white flower, with the petals heavily crested at the base, and regularly reflexed, giving the flower a perfect outline. This does not differ materially from *L. speciosum præcox*, excepting in the color of its anthers, which are of a clear, bright yellow. In this class was *speciosum purpuratum*, which bears the same relation to the well-known *rubrum* as *Kratzerii* does to the *album*. It is the strongest grower of this class; when well established a single stalk will carry forty flowers, and rise to the height of six feet.

There were numerous fine specimens of *auratum*, some of which were remarkable for size, being twelve inches in diameter.

We cannot but regret the want of a society that could give weekly exhibitions of seasonable flowers; exhibitions where all could freely participate without that "trade flavor" that detracts from the usefulness of private exhibits. We do not despair, for there is to be an election in December, and perhaps a *man* may be found.

* * *

A Grand Exhibition of Chrysanthemums will be given by the New York Horticultural Society during the first week in November, at Cosmopolitan Hall, Forty-first street and Broadway, which is expected to surpass any floral display ever seen in this country. Many of the specimen plants are over five feet in diameter and are covered with hundreds of brilliant flowers; there will also be some tree or standard chrysanthemums on long, straight stems, with heads of flowers three feet across; then, again, some plants will have three or four kinds grafted on one stock; others will be trained in various shapes, some to columns twelve feet high, some to the shapes of fans and rainbows. The display of cut-flowers will be very fine. The actual number of flowers is expected not to fall far short of a million. During the exhibition a special show of designs in chrysanthemum flowers will be made, representing screens, fans, garlands and vases, exactly as is done in the houses of the Japanese nobles. This department, in all probability, will be under the direction of a Japanese lady of title. The decoration of the hall has been made with a view to harmonize with the display of flowers.

The hall will be lighted by electricity, and Cappa's Seventh Regiment Band will give a concert each afternoon and evening. A march, entitled "The March of the Queen of Autumn," has been composed by Signor Cappa for the occasion, and will be played at each concert.

The exhibition will be open from ten A. M. until midnight.

* * *

The New Horticultural Society of New Jersey will give an exhibition of flowers and plants at Orange on November 9. Messrs. J. R. Pitcher, J. F. Knorr, T. H. Spaulding and John Farr, gentlemen who are well known as enthusiastic growers of the chrysanthemum, have been elected officers to organize and direct the necessary details.

Entries to the exhibition must be made before October 25 to Mr. J. F. Knorr, Orange, N. J. After that date no entries will be accepted to compete for any of the schedule prizes, but will be recognized as extra exhibits and duly considered. One or more entries may be made in each class, but not more than one premium will be awarded to any exhibitor in the same class. There will be eighty-four classes, divided into four divisions. Three of the divisions will be for chrysanthemums and the fourth for orchids, palms, crotons, caladiums, begonias, tropical plants, ferns, greenhouse or conservatory plants, exhibits of vases or baskets of plants and collections of cut-flowers. Premiums varying from \$2 to \$25 will be awarded in eighty-four classes, the total amount being about \$450.

The highest premiums will be as follows: Class 1, for twenty-five distinct varieties of chrysanthemums, double, to be shown in pots, one plant in each pot, each plant to have a single stem, first, \$25; second, \$15; third, \$10. Class 15, for a group of chrysanthemums, arranged for effect, in a space of not more than sixty-four square feet, first, \$20; second, \$10; third, \$5. Class 16, for best named collection of cut chrysanthemums, three flowers each, first, \$15; second, \$10. In Class 35, the Pitcher medals, donated by Mr. James R. Pitcher, will be given as follows: Silver medal for first and bronze medal for second best collection of cut-flowers (chrysanthemums), distinct varieties. Class 44, for twenty-four varieties cut-flowers, three or more flowers of each, distinct, first, \$10; second, \$5. Class 74, for best exhibition of orchids in bloom, \$10. Class 75, for best collection of orchids, single specimen, \$5. Class 76, for best collection of palms, \$10. Class 77, for best collection of crotons, distinct, \$10. Class 78, for best collection of caladiums, \$5. Class 79, for best collection of begonias, \$5. Class 80, for best single specimen tropical plant, \$10. Class 81, for best exhibit of ferns, foliage or tropical plants, arranged in pot, vase or basket, \$5. Class 82, for best exhibit of greenhouse or conservatory plants, arranged for effect, \$5. Class 83, for best exhibit of vase or basket of plants for outdoor decoration, \$5. Class 84, for best collection of cut-flowers, any variety, \$20.

* * *

"There is many a poor farmer—writes Peter Henderson—who mourns the loss of a corn crop, and many a poor gardener who can ill afford to lose his cabbage or celery crop, who would have saved their lost crops had they known that a stamp of the foot in the hills of corn, or a press of the foot along the roots of the cabbage or celery, would have proved the salvation of the crop in each case."—*Exchange*.

Let us add our testimony to the above axiom in farming operations. Last spring, when the farmers in our locality were putting out their cabbage for seed purposes, we urged those with whom we were particularly interested to make good use of their feet in planting. We tried to show the necessity of so doing, and assured them that to get the best results the earth should be packed around the stumps as firmly as if they were fence-posts. What was the result? Those who took our advice invariably got four times as much seed as those who were indifferent or would not heed the advice. There were two notable instances: A planted his stock of cabbage in the ordinary, slip-shod manner, by making a deep furrow in which he placed his plants and then ploughed up to them on either side, which finished his work. B did the same, but did not stop there; he spent two days in packing the earth firmly around the stumps, which he did by treading. At the harvest, A got a little less than 100 pounds of seed from his acre and B got a little more than 700 from his acre.

Under ordinary circumstances A should have had the larger crop; his stock was equally good, and the variety one that averages a greater yield. The lesson: A doesn't believe in book-farming; B has a good library and knows

what is in it, and believes, moreover, that intelligence is quite as necessary on the farm as is the mule.

* * *

Roman Hyacinths.—The earlier these useful early flowering bulbs are planted the stronger flower-spike will they make. If the flowers are only required in a cut state it is best to grow them in deep pans. If the latter are ten inches or twelve inches in diameter a dozen bulbs may be put in each; but if wanted to flower in pots for use in the conservatory, or for any other purpose, many like to pot each bulb in a three-inch pot, and as soon as the flower stems are about an inch in height to select such as will come into flower together and then put them in five-inch or six-inch pots. Five in the smaller and six in the larger size make nice little specimens, and it does the plants no harm to shake away half the soil in order to get them in the pots. Of course it would be less trouble to put the required number of bulbs at once in the pots in which they are to flower; but by that plan one cannot depend on all being in flower at one time. By selecting them according to the growth which they have made that point is secured. As soon as potted the pots or pans should be placed in a cold pit or some other cool structure for the first six weeks. But wherever they are placed they should be in darkness. If in a pit, a mat should be thrown over the glass; if in a house, a few plates over them will answer the same purpose. If they are wanted in flower by the middle of November, they must be introduced into a higher temperature for a fortnight or more before that time, according to the progress they have made.

* * *

Bulb Catalogues.—As usual, our tables are loaded with catalogues of Dutch and other seasonable bulbs. In general appearance they are fully equal to those of former years, and the value of their cultural instructions is in some cases considerably enhanced. There is one thing, however, that we notice with no little regret, viz., the want of a key to the new nomenclature which would enable us to know just what we are buying.

The necessity for variety names is actual—in fact, indispensable; without them we could neither buy nor sell any new or desirable variety of a given species. The necessity of a variety name makes its alteration, for the purpose of misleading the buyer, a deception of the meanest as well as of the most provoking kind. This practice is carried on to a greater extent than is generally supposed, and as much, if not more, in this country than in any other. We find in one catalogue a spread-eagle collection of hyacinths in which are a dozen or more varieties, the names of which were never before in print. Now, we all know very well what Norma is when we buy a hyacinth; we also know it will be none the more beautiful under its new name, Naomi (my pleasantness). Neither will La Candeur appear any whiter or sweeter by being called Laban (white). There seems to be an impression that a new name will bring a new customer. On the contrary, the best way to disgust a customer and drive him away is to sell him an old plant under a new name. In other bulbs we notice a "giant," which is

simply a variety that, under favorable circumstances, will produce a very strong bulb and enormous flowers. Now, in all the cases of abused nomenclature which we have noticed no one is particularly injured except the dealer, and we cannot see where he is benefited in the least by his attempts at deception. Why not call Norma by its proper name and sell it on its merits?

* * *

How to Dry Flowers.—To preserve the color when drying flowers it is necessary to dry them as quickly as possible. Almost all, except fleshy flowers, will keep their color well if placed between two sheets of blotting-paper and ironed. The iron must not be too hot. To retain the color of red orchids, dip the flower while fresh in a mixture four parts spirits and one part spirits of salt. (Take care not to let this mixture fall on clothes, as it will burn them.) Let the fluid dry off the flowers by exposure to the air, and press them in the usual way. To glaze flowers, use any transparent varnish. The secret of pressing flowers and leaves is to frequently change the paper in which they are placed and to avoid too sudden pressure at first.

* * *

Gladioli.—Here is a very good suggestion from a foreign exchange: "The most reliable way in which to get and maintain a stock of gladioli is to raise one's own corms (bulbs), which may be readily done from seed. Plants thus raised will flower strongly the third year, and a little seed sown every year will keep up the stock. The next best plan is to buy seedling bulbs of a flowering size, as these invariably do better than named sorts, which are reproduced by offsets. Gladioli must be planted in deep, well-manured soil, and they should have a change of ground every year."

Again, we find some good practical hints on the gladioli from one of the best English growers:

"During the later part of summer the gladiolus reigns supreme as the most brilliant and varied of the many hardy flowers that bloom at this period. It is impossible to overestimate the value of this flower for cutting. The gladioli appear to enjoy the abundant moisture we are getting this year, as nine out of ten of our plants are sending out branched spikes or heads nearly equal to the central one, and, when grown solely for cutting, three or four medium-sized spikes are certainly preferable to one very large one. We plant in rows, between dwarf roses, and they get on well together; also, between evergreen shrubs, such as euonymus, and they appear to like the shelter, the brilliant, scarlet spikes of *G. Brenchleyensis* looking well among the sombre green foliage of rhododendrons. Many have an idea that they are expensive bulbs; and so they are, if the best-named and certificated sorts are employed. But for general purposes I should advise the purchase of bulbs of seedlings, in mixed colors, for, except for exhibition, they are as good as need be wished. They are of the simplest culture. Soil that has been enriched by manure and laid up rough in autumn will be fit for planting any time during early spring. Draw drills and lay the bulbs in, one foot apart, put a little sand over the bulbs, return the soil,

and they will require very little attention, beyond staking and tying, until the blooms are fit to cut. Look out for side spikes when cutting the centre one, as when this is cut away the side spikes soon develop well."—*J. Groom.*

* * *

Gladiolus purpureo-auratus hybridus.—Under the somewhat misleading name of *Gladiolus purpureo-auratus* an interesting, if not showy, species was introduced some years since from the Cape of Good Hope, which has at length begun to yield, in the hands of the cross-breeder, some highly satisfactory results. The species named produces rather narrow hood-like flowers, resembling in form those of the old *G. psittacinus*, but of a yellowish-green color, each of the three lower divisions having a large crimson-brown blotch in its centre. By crossing this species with various choice varieties of the *Gandavensis* hybrids a strain has resulted presenting some novel features, the most important of these being the reproduction of the dark blotches of the original upon a ground of a far more pleasing character. A new break being thus originated, there are no limits to the variations in color and form which may result. Messrs. Froebel, Lemoine and others have already offered a number of seedlings of this strain possessing more or less interest, and as they seed freely under favorable circumstances the intelligent amateur has a fair chance of similar success. The plants are remarkable for their hardiness, and seedlings will bloom the second year.—*Exchange.*

* * *

In speaking of gladiolus, let us say that at the recent exhibition in New York a correspondent of an English paper began to question us in regard to the exhibit, and to our surprise he said, "it was his custom to attend all gladiolus exhibitions in England, but he had never seen so large a number of varieties on exhibition as were here shown; that many of our new varieties—American seedlings—far surpassed any he had before seen." Among the more conspicuous were *Sea Foam* (Halleck & Thorpe), a new yellow, not named, same growers; *Bayard Taylor*, *E. M. Stanton* and *General Sheridan*, from Allen's nursery. The fact of our being able to show a greater variety of gladioli than the English growers was a surprise to us, but not so great as the fact of our being able to produce them so cheaply was to him.

Literary Notes, &c.

The leading feature of the *Century* for the coming year beginning with November will be the authorized life of Abraham Lincoln by his confidential secretaries. The work, which was begun with the sanction and assistance of President Lincoln himself, and continued under the authority of the sole survivor of the President's immediate family, has been in active preparation during the past sixteen years. It is the only full and authoritative record of the private life and public career of Abraham Lincoln, including an account of the causes of the rebellion, and a record, at first hand, of the inside history of the civil war, and of President Lincoln's adminis-

tration, important details of which last have hitherto remained unrevealed, in order that they might first appear in their proper connection in this authentic history.

Hon. S. S. Cox, United States Minister to Turkey, contributes to the September *Wide Awake* an interesting article upon "L'Enfant Terrible Turk," which is illustrated from Turkish photographs. Mrs. Helen Campbell writes the "war story" of the number—"In the Turtle-Crawl"—relating a thrilling experience of her ancestors in the Seminole War. Several very attractive short stories are also given in this number, and Miss Harris, in her series of articles entitled "Pleasant Authors," furnishes some very instructive biographical sketches of prominent writers.

Bulbs, Plants, Flower-Seeds and Garden Requisites. Peter Henderson & Co., 35 Cortlandt street, New York. Wholesale and retail catalogues.

Trees, Shrubs, Plants, Roses, Bulbs, &c. The Bloomington Nursery, Bloomington, Ill. Wholesale catalogue which calls special attention to their large stock of standard apple trees, pear trees and choice varieties of small fruits.

Grapes. The last issue of Green's Fruit-Grower, a quarterly journal devoted to the orchard, garden and nursery, gives much useful information in regard to grape culture.

Plants, Bulbs and Seeds. N. J. Herrick, Springfield, Mass. Illustrated retail catalogue.

Select Roses. Ellwanger & Barry, Rochester, N. Y. Descriptive catalogue for 1886.

Fruit Trees and Small Fruit Plants. William Parry, Parry P. O., N. J. Wholesale catalogue for nurserymen and dealers.

Bulbs, Seeds and Plants. Henry A. Dreer, 714 Chestnut street, Philadelphia, Pa. Annual wholesale list of hyacinths, tulips, &c.

Selected Farm Seeds for Fall Planting, also Bulbs, Flowers and Small Fruits. Johnson & Stokes, 219 Market street, Philadelphia, Pa. Retail catalogue.

Roses. E. Bonner & Co., Xenia, Ohio. Wholesale price-list for the fall trade of 1886.

Roses, both New and Old, Geraniums and other Plants. Hill & Co., Richmond, Ind. Wholesale price-list for fall of 1886.

ANSWERS TO CORRESPONDENTS.

Dahlia.—*Old Subscriber*—From your description you have been quite successful with your seedling. There is no name for it; you alone, as the originator, have the exclusive right to give the name. You will probably later on find the flower will sport considerably, some being self, others parti, colored.

Lilium longiflorum.—*Mrs. De Lacy*—You can, in safety, leave your bulbs in the ground during the winter, if you mulch the bed as you propose, with three or four inches of dry leaves, and the flowers will be far better another season for this method of treatment.

Gladiolus.—*Mary E. Johnson*—You will incur no risk; on the contrary, you will gain by leaving the bulbs outside during the winter, if they are planted deep enough to be secure from frost, which you say rarely penetrates more than an inch. As for raising new varieties from seed, that is an easy task; sow as you would lettuce, where they are to bloom, cover the seed half an inch in depth with rich, friable soil. Next winter, after the tops are dead, cover the bed with the same kind of soil to the depth of two inches.

Plant for Name.—*Rosa*—*Clematis crispa*. It is very common in some parts of the South where you say you found it.

Hyacinths in Tomato Cans.—*Subscriber*—Certainly they will do well. Use good, rich soil and have the top of the bulb even with the rim of the can. After potting,

plunge in some convenient out-of-doors place, cover well with rubbish, and leave until after the middle of December, then bring in, water liberally and give them plenty of light, although but little sun is required.

Seedling Gladiolus.—*Amateur*—The specimen you send is very good, but is not extraordinary. And let us here say that to get good results you must first get good stock. Select such as have large well-formed flowers, and with positive colors; if variegated, let the markings be well defined. Good results are not accidents, but the reward of well-directed industry and discrimination. It is folly to save seed from a bed where poor sorts are grown.

Green Dahlia.—*Dahlia Fancier*—We cannot tell who first introduced this odd flower. It is by no means rare and far from beautiful.

Calla.—*Mrs. W. J. S.*—If your window is large, so as to afford plenty of light, and the temperature high, then a large pot filled with very rich soil will give you a plant of enormous size. We prefer for all purposes smaller plants. A six-inch pot will give a plant quite as satisfactory as a much larger one.

Geraniums.—*Helen and Viola*—The reason your geraniums are all leaf and no flower is because the soil in which they are growing is too rich. In taking up your plants crowd them into as small pots as possible and cut them well back. Before spring you will have compact plants with an abundance of bloom.

NEWSPAPER WAIFS.

— Photographer (mechanically)—“Now, look pleasant, please. (With agitation)—Oh, don't smile quite so much; I have only a small plate in.”—*Grip*.

— We have a good many rising young men in this country, but somehow you don't notice them in the crowded horse-car, unless the woman who wants to get on has more than an ordinary share of youth and beauty.—*Somerville Journal*.

— Marion, Ja., boasts of a woman horse-thief. Those persons who contend that women are inferior to the male sex will have to revise their opinions before long. A woman who knows enough to steal horses ought to be equal to packing ballot-boxes or monkeying with election returns.

THE TEST BY RESULTS.

When George Stephenson, the inventor of the locomotive, was about to start out on his first trip, his declaration that the water in his boiler carried a power that would revolutionize the carrying trade of the world was by many regarded as the idea of an enthusiast who had become partly crazed in his experiments. He was not led to abandon his undertaking, however, by any lack of faith in those about him, but he persevered and improved his machinery until he saw results which not only satisfied him, but all who looked at them, that his fullest faith had been more than justified. The same test which decided the merits of the claims for the powers of steam is a fair one for to-day, and it is one of the wonders of the age that many powers undiscovered hitherto have now come to the time of ripening and unfolding. One of the most striking of these developments is Compound Oxygen. For awhile it also met with incredulity. The idea that it could be stored in water and transported long distances met with the same doubt that had greeted every other new statement as to the powers in nature. But the same perseverance that has in so many fields won success led to patient endurance of the test by results. It was declared that the object to be attained by this new power was the curing of disease, and trials made of it by sufferers from chronic diseases in every State and Territory in the United States have amply demonstrated the fact that it accomplishes its object. The letters received and on file in the office of Drs. Starkey & Palen, No. 1529 Arch Street, Philadelphia, from these patients, report cures in asthma, bronchitis, catarrh, dyspepsia, eczema, epilepsy, dropsy, cancer, hay-fever, heart disease, diseases of the eye, of the ear, consumption, rheumatism, diseases of the kidneys, headaches, paralysis, locomotor ataxia, and other diseases. Nervous prostration, from mental strain and overwork, has in many cases given way to renewed powers and enjoyment of life.

These reports are numbered by thousands, and come from men and women in every position in life. A college president in Vermont writes that though he is well on in years, his voice has been restored so that he can give his lectures and addresses without inconvenience, after having been a sufferer from throat disease for a long time. The president of a college in Texas writes that he considers Compound Oxygen a great remedy. Editors of papers in South Carolina, New York, Minnesota and Oregon all testify to health restored by its use, either by themselves or members of their families. When such widespread agreement as to results is witnessed there can be no doubt as to Compound Oxygen. Address Starkey & Palen, 1529 Arch Street, for the history of the Compound Oxygen, which is sent free.

MIGHT AS WELL DIE ON THAT AS ON ANYTHING ELSE.

When one has suffered on, month after month, consulted all the best “medicine men” within reach, tried all the remedies suggested by sympathizing friends, still suffers on, becoming weaker and more wretched, it is little wonder that such an one becomes despondent and cries out, “I might as well die on one thing as another, and will, therefore, try anything, even the Compound Oxygen.”

Mr. Alonzo Clark, chief salesman in the large business house of Davis, Collamore & Co., of New York,

was so greatly reduced by long-continued lung trouble, proceeding from malaria, that the doctors gave him up. They said, “If you have any business affairs to arrange, you had better arrange them soon, for you cannot live long.” He had all the symptoms of advanced consumption. By this time he thought the doctors had done all they could for him, which they verily had, at the rate of ten dollars a visit. Somebody dropped a hint in his ear about Compound Oxygen, and he thought he might as well die on that as anything else. But on taking it for a little while he found that he was not going to die, but to live. To make a long story short, Mr. Clark is again at his post in the store on Broadway, and attending to business with his old-time regularity. He is, as might be expected from his experience, a very firm believer in Compound Oxygen.

This Compound Oxygen has a history wonderful in its way, and worth reading by everybody whose life is worth preserving. That history is embodied in a very interesting two-hundred page treatise, which is sent by mail on application. Please address Drs. Starkey & Palen, 1529 Arch street, Philadelphia, Pa.

Our artist readers should not fail to send to Edmand's Art Supply Store, 12 Bromfield street, Boston, for their reduced Price-List, and learn how cheap they can buy the best quality of everything needed by artists. They warrant everything to be satisfactory, and carefully pack all goods sent by mail or express. Please mention this paper in writing for them.

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NEWSPAPER WAIFS.

—“That settles it,” was the philosophic small boy's comment on the races, “if we ever go to war with England the fighting must be done with yachts, 'cause then we could run away and the English could never catch us.”—*New York Tribune*.

A Hard Fate

it is, indeed, to always remain in poverty and obscurity; be enterprising, reader, and avoid this. No matter in what part you are located, you should write to Hallett & Co., Portland, Me., and receive free, full particulars about work that you can do and live at home, at a profit of at least \$5 to \$25 and upward daily. Some have earned over \$50 in a day. All is new. Capital is not required. You are started free. Either sex. All ages. Better not delay.

—The St. Louis *Chronicle* pathetically remarks that a wife should be like roast lamb—tender, sweet, nicely dressed, plenty of fixing, but without sauce. And the natural inference is that the editor considers that the mint that usually goes to make the sauce should form the basis of a julep for himself.—*New York Commercial Advertiser*.

“Your Agency obtains lower rates from us than any other advertiser, for the good reasons that you send us more business and always pay promptly,” writes an Iowa publisher to Geo. P. Rowell & Co., Newspaper Advertising Bureau, 10 Spruce Street, New York.

—Omaha Man—“Came by way of St. Louis, eh? Anything new down there?” Chicago Man—“Nothing that I heard of, except that they are getting up a corporation for the prevention of premature burials.” Omaha Man—“Well, I suppose it is rather difficult to tell whether a St. Louis man is alive or not.”—*Omaha World*.

ONE HUNDRED AND THIRTEEN MILES OF ORGANS.—In numbering the organs of their manufacture, Mason & Hamlin have reached No. 160,000. Arranged in a line these would reach one hundred and thirteen miles or would fence the railroad on one side from the Grand Central Station, in New York, to within twenty miles of Springfield, Mass. Not only does this show the great popularity of American organs, but it illustrates what was declared by James Parton to be a general fact, that he who makes the best article in his line always has the greatest success. We understand that the Mason & Hamlin Company's new upright piano is now commanding a large sale, and is, in every way, up to the standard of their unrivaled organs. We predict a large success for this piano, which is constructed on a new system, said to be a decided advance over the prevailing wrest-pin system.—*Boston Journal*.



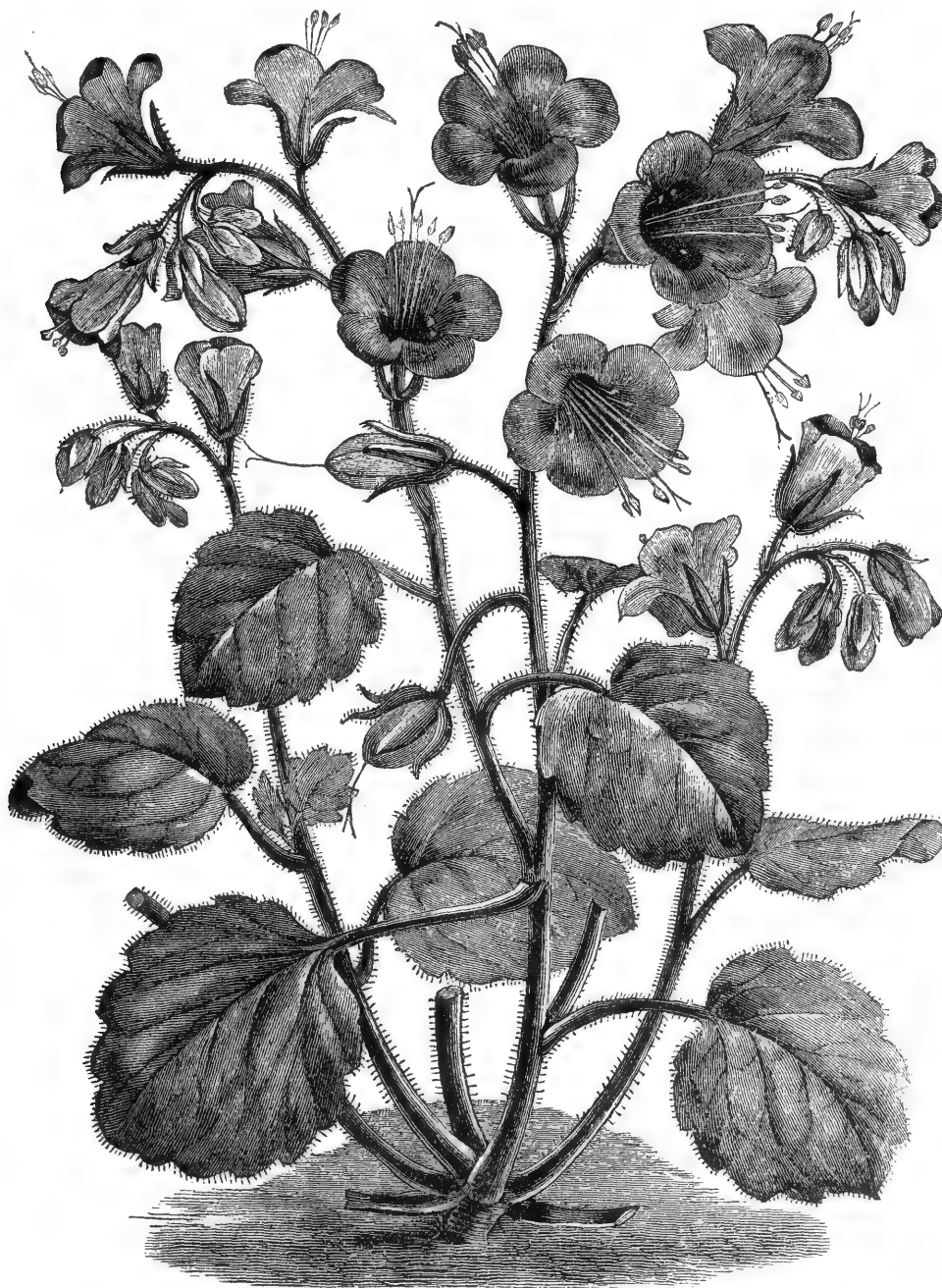
HALFORD
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LADIES'
FLORAL CABINET.

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No. 11.



CAMPANULA PRIMROSE, PHACELIA CAMPANULATA. (SEE NOTES AND COMMENTS, PAGE 297.)

BULBS FOR EARLY SPRING FLOWERS.

AS the season is at hand for planting what are properly known as Dutch bulbs, it is necessary to make all the arrangements at once in order to secure the best results. In fact, it would have been better if plantings of some kinds had been made in October. That, however, our readers would not do. No argument will convince anyone that it is best to despoil the beauty of the present garden in hopes or for the sake of something more beautiful in the future. And we cannot think strange of these feelings, for we entertain them ourselves. We want to plant a bed of hyacinths and have the bulbs in readiness; but the ground is occupied with cosmos, now (October 23) in full bloom, and the bed is bordered with plants of *nana compacta multiflora* petunia which could not possibly look better. How can we disturb them after watching and tending them so carefully to secure the good results that we are now enjoying? It is simply impossible, and the next best thing is to wait a little longer and take more pains in protecting our bulbs after planting or to find another place for our spring flowers. Whatever we do we should do well, and in order to do well we should begin our work anew, lay our plans now for the future, and there is no better time to plan for the beautiful future than in the ever beautiful present, whatever time that may be. We should not plant a bulb or seed, a tree or shrub, without first carefully considering what its effect is to be on future plantings. So, now, in selecting a place for our spring flowering bulbs, let us look carefully over the ground.

We can now see plainly that had we planted hyacinths last year where our petunias now are we should have done the proper thing, for they would have fulfilled their mission, and the petunias would have been fitting monuments over their departed forms. All beds of early-flowering bulbs should be so placed that they will be suitable for annuals which will keep up a succession of bloom the entire season, besides furnishing a much-needed summer mulching for the bulbs, which need not be taken up annually, as is the usual custom.

We have thus far paid more attention to the selection of the place than we have to the bulbs. Now, what shall they be?

THE HYACINTH

has long and justly been considered as supreme among the blossoms of spring, as the rose has among the summer flowers, and perhaps a few words in relation to its history will be of interest. It is a native of the Levant, but grows abundantly about Bagdad, where it flowers naturally in February. The purple and yellow flowering varieties were found in Russia at an early date by Lepechin. The hyacinth was common in English gardens prior to 1597, at which time Gerard, in his quaint old herbal, mentions them as follows: "These kinds of *jacints* have been brought from beyond the seas, some out of one country and some out of another, especi-

ally from the East countries, whereof they took their names, *Orientalis*."

The bulbs and many seeds of Eastern plants were brought, it is supposed, from Persia during the early part of the reign of Elizabeth, as about the year 1561 she enabled a company of merchants to visit Persia for the purpose of obtaining raw silks, &c., and on their return they brought out, in the language of Parkinson, "various bulbous to decke the gardens of the curious." From these sources the Dutch florists received their stock, from which has grown one of the most extensive and profitable floral industries.

The best soil and compost for the hyacinth is considered by the Dutch florists to consist of pure white sand, rotted leaves of trees and thoroughly rotted manure from the cow-stable, and this prepared soil is renewed annually after the bulbs are lifted in summer. The compost in which they grew is removed to the depth of about nine inches and the subsoil is dugged over. A new layer of compost of equal depth is afterward introduced, and in this the choice bulbs are again planted in autumn. After the hyacinths are removed they are succeeded by tulips, and these in turn by narcissus and crocus, the earth being sufficiently rich to produce these crops after a crop of hyacinths has been secured.

From the middle of October to the middle of November is the best time for putting the hyacinth bulbs in the ground, for when planted earlier they are liable to appear above ground in the middle of winter, if the weather proves to be mild, as it so often is in this fickle climate, and if left until later the bulbs will be weakened by their natural tendency to vegetate.

The hyacinth is one of the plants that thrive best in a saline atmosphere, and is, therefore, well adapted for gardens near the sea-coast. It loves a sandy soil, and we recommend a mixture of sea sand in preference to any other, whenever it can be obtained. When planted in pots select those of the deepest make, and fill them with a sandy loam or earth as nearly like the compost recommended as possible. We know of no flower that will flourish in so great perfection in the window garden as the hyacinth, whether grown in pots or in glasses. If grown in the latter, we should recommend those of a dark green color, as the common white glass throws an injurious light on the roots. Nature tells us that the parts of the plants which are destined for the earth cannot be kept too much in darkness; whereas the plants when growing cannot receive too much light and sun, although they will flower quite well if they do not have any direct sunlight and should, therefore, be placed on a table or stand near the window. They should not be placed on the sash where they are frequently seen, as, on the one hand, the direct rays of the sun on the glasses are liable to heat the water enough to cook the bulbs; and, on the other hand, during the severe weather the current

of cold air which comes through between the sash is, at times, sufficient to freeze the water, or at least to chill it to a degree beyond which the plant will thrive. At all times let the temperature remain at nearly the same point, excepting at night, when it may be allowed to fall ten degrees below that at midday.

The beginning of November is early enough to place the bulbs in glasses, and it may be done from that time until the first of January, thus keeping up a succession of bloom. The glasses should be filled with soft water, and some growers recommend putting a small piece of nitre or a few pieces of charcoal in each. There is no need of changing the water as long as it is clear and sweet, and it will remain so unless it is allowed to get too warm. When the plants begin to grow it is important to keep the glasses filled up above the base of the bulb. The plants will be strengthened by having as much free air as the season will permit, avoiding cold draughts, and when the plants are in flower they should not be allowed to receive the rays of the sun, as this materially lessens the duration of bloom.

Hyacinths are easily grown in pots, boxes, fruit-cans or anything that will hold earth. Use the compost we have recommended, or any other soil, if more convenient. Place the bulb so the point will be even with the rim of the pot. Do not press the bulb too firmly in the soil; if so, the roots, instead of going downward, will lift the bulb upward and out of the pot. After potting plunge out of doors in any out-of-the-way place, cover with coal ashes or any coarse litter to prevent freezing, then bring in about the middle of December and treat the same as ordinary window plants.

THE POLYANTHUS NARCISSUS

is next in importance to the hyacinth for the window garden, and may in all respects be grown in the same manner as the hyacinth. The polyanthus narcissus is so called on account of producing so many flowers on one stalk. The generic name of this species, *tazetta*, is from the Italian, and signifies "little cup," as the nectary or chalice of the flower is small in comparison with many kinds of narcissi.

This narcissus is a native of Portugal, Spain, the South of France, Italy, and the islands of the Archipelago, and the neighborhood of Constantinople, as also of Japan. The Chinese call this species of narcissus *shuey-seen-fa*, and it is used by them for religious purposes at the new year. The bulbs are sent every year from Chinchew, being only kept at Canton during the time of their flowering. They are planted in water-tight pots, which are filled with sand or small stones.

The narcissus is one of the most valuable of our flowering bulbs, both on account of the early season in which it blossoms and the numerous flowers which it gives out from one stalk, as well as for its delightful fragrance. On this account the florists in Holland, France and England have taken great pains in improving it by cultivation and in raising numerous varieties from seed, some of the catalogues listing hundreds of named sorts, more than any one but an enthusiast would care to grow or even could recognize the differences which entitle the varieties to distinctive names.

THE JONQUIL

has within the past ten years been the recipient of more attention than all the other members of the narcissus family combined. The growers have simply gone mad in their efforts to produce new sorts, and in their determination to convince the world that they really had wrought changes of an important character in all the points that constitute a beautiful flower. Of course there have been improvements, but when we compare the drawings of the flower of the present day with those made in 1608 we fail to see any marked changes. Whether there has been any noticeable improvement in the species we very much doubt, because when a thing is absolutely perfect an advance is an impossibility.

The jonquil is distinguished from other species of narcissus by its rush-like foliage and hence the name, which is derived from *juncus*, rushy. Gerard and other old writers call it the rush daffodil or *Narcissus juncifolius*. This is the most fragrant of all the species of narcissus and is often found too powerful for small rooms. It flowers well in water and is admirably adapted to the border, where it should be grown in clumps. The light and dark shades of yellow should be kept separate and sufficiently far apart to show their distinctive characters. When planted in the open ground it should have a sunny situation and should remain undisturbed for many years. The beauty of the jonquil is enhanced by large clumps, as it then makes an attractive figure, both by its rushy foliage and fine yellow flowers. As jonquils and the more tender varieties of narcissus are liable to injuries by heavy winds, they should be planted in such situations as are sheltered from the prevailing winds by evergreen shrubs. This will lengthen the duration of the flowers, because they will be shaded from the afternoon sun and will appear to greater advantage when contrasted with the dark foliage of evergreen trees.

THE TULIP.

"Then comes the tulip race, where beauty plays
Her idle freaks, from family diffus'd
To family, as flies the father dust,
The varied colors run; and while they break
On the charm'd eye th' exulting florist marks,
With secret pride, the wonders of his hand."

Though last on the list of truly valuable Dutch bulbs for the window garden and border, they are by no means of the least importance. Tulips have been grown from time immemorial, yet so beautiful are they that our love for them never wearies or grows old. On the contrary, it increases with time. The tulip mania of 1637 was one of the wildest in the history of speculations, and the real history of its cause is but little known. The common opinion that it was speculative is a mistaken one. The true inwardness of it was a true love for the beautiful, as seen in that flower, and when a new combination of color, in a form that was regarded as perfect, was obtained, wealth contributed in the most lavish manner for the possession of what was then considered the rarest object of beauty in existence. The love for the tulip is as deep now as then, but, thanks to the Dutch florists, who have done so much to develop this flower, and who annually grow many millions of

bulbs, a monopoly of a given variety or type of flower is no longer possible, and the tulip is within the reach of all who care to grow it.

And why should it not be more generally grown is a question that often presents itself. Its culture is of the simplest. Once planted, the tulip bed can remain for years undisturbed, or the bulbs can be taken up annually after flowering and—this is the better way—laid upon a shelf to dry, and replanted in October or November, with an annual increase of 100 per cent. The cost of a good collection is trifling when compared with its real worth and the satisfaction derived from it.

For the garden we prefer what is known as late flowering or exhibition tulips, the only ones a real tulip fancier recognizes, and we should grow but few others, preferring to wait a few days longer in spring for the sake of flowers with true character. The early varieties make the most show, and dazzle us with their brightness, but they are fickle. The late ones captivate us by their more noble growth, strongly-marked character and enduring beauty.

The soil best suited to tulips is a strong loam, moderately enriched. They do not like a rank soil, or one nearly so rich as the hyacinth demands. In fact, put them in the ordinary vegetable garden and they will find a home congenial to their tastes.

For the window garden the early flowering sorts are decidedly preferable. The Duc Van Thol section flower the earliest, are sweet-scented, have the most vivid colors, and in all respects are greatly to be preferred. Three bulbs in a fine rich pot will do nicely, and if three colors are chosen, such as scarlet, yellow and white, the contrast will be marked, and the effect very pleasing.

In making a selection of any of the bulbs we have noticed, the catalogue of any reliable seedsman will be a safe guide. It will give you the grower's description, which is accurate, and, together with this, you will get the grower's experience in selection, which is invaluable. Some of our dealers put up special collections of the best varieties for a given purpose. These we believe to be, in most cases, perfectly reliable.

WHAT MIGHT HAVE BEEN.

"Of all sad words of tongue or pen,
The saddest are these: 'It might have been.'"

THESE hackneyed lines were the epitome of the writer's feelings one October morning, when the Torrey Botanical Club started off on a tramp, or a field-day, to give it a more pretentious title. After reveling in fond anticipations for a month or more, after roseate dreams of botanical bliss with the luminaries of said club, it was trying to meet with an abrupt disappointment. So, restricted to a few rooms instead of the wide fields, and botanists in cold print instead of botanists in the living flesh, the writer began to spin botanical romances—to dream of the glories of the "Woods of Arden." Nothing Shakespearean is meant here; the Woods of Arden in question lie in the locality made memorable by Buffalo Bill and his border drama. Here it was that the botanical tramps above mentioned held their trysting-place. And here the writer followed them, with Gray's "Manual of Botany" and the wings of imagination.

Staten Island, like adjacent Jersey, is a very paradise to the botanist. The flora of this little area comprises some 1,400 species and varieties; some widely dispersed, others indigenous only to the island. The habitats vary as greatly as the species; woodland, moorland, and bog-land are here represented. The highest point of the island, having an elevation of something over four hundred feet, contains a depression something like the crater of a by-gone volcano, forming a little pond, devoid of any apparent inlet or outlet. It is, of course, fed by springs, but is certainly a phenomenon at this elevation. This pond contains a varied collection of aquatic plants. Frail arrow-head rears its delicate snowy flowers among the marsh sedge and cat-tails, and the pellucid water is half hidden by lilies; fragrant white pond-lilies and their more plebeian cousin, the yellow nuphar. The damp ground

surrounding the pond is a tangle of coarse vegetation. Swamp sumac stands there in its sinister beauty, and among the riotous grape-vines is the poison-vine, mercury, as the country people often call it. I was rather surprised some months ago to find a writer in the *London Garden* recommending *poison-vine* as an ornamental climber, its varying autumn tints making it most attractive to the eye. That is certainly true enough, but by the time the reckless experimenter had recovered from the effects of this botanical rattlesnake its beauty would not appeal very forcibly to his feelings; he would probably decide that scarlet-runner beans were quite good enough for him to use for covering unsightly buildings.

Earlier in the season the low grounds of the island show a greater profusion of blossoms than they do now. The dainty meadow beauty, *Rhexia virginica*, brightens them with its rosy magenta flowers, as frail in their own type as the arrow-head. The *Rhexia* does not seem to attract much notice here, yet Mr. Robinson honored it with a colored plate in the *London Garden*, and it is much admired by cultivators in England. Its beauty is of a somewhat formal type, but very charming. Still earlier adjacent fields display a mass of delicate lavender-blue, produced by the little *Houstonia coerulea*. Bluets it is commonly called—why, no one knows, for this name properly belongs to the blue corn-flower. It also rejoices in the names of "innocence," "dwarf pink," "quaker bonnet," "Venus' pride" and "American daisy." It is not often that one tiny flower is so plentifully christened, and there is a wide range of choice in the nomenclature. In spite of its many names, the houstonia is scarce or local—scarce one can hardly call it when one sees acres of blossoms on Staten Island, but local it certainly is. I believe it is plentiful in Eastern Pennsylvania, but for a long time it was supposed to

grow in but one part of New Jersey, near Camden. However, the flat meadows near Passaic produce it plentifully, and, most contradictory of plants, I found it holding up its brave little head on some high rocks around Passaic Falls, where, botanically speaking, it had not the slightest business to grow.

Down in the moist parts of these same fields are masses of tender, much-berhymed forget-me-nots,

"That grow for happy lovers,"

according to the laureate, though personal experience of many albums makes the writer dedicate this unassuming flower to the autograph fiend. Blue as the October sky or pink as an infant's downy cheek, they are tenderly regarded by the least sentimental of mortals, though perhaps the name has something to do with their intangible charm. Certainly Tennyson would never have connected them with lovers of any degree if he had been taught to refer to the plant as *Myosotis palustris*, apart from the fact that this name would hang over his rhymes at both ends.

The high ground offers most floral attractions late in the season:

"Radiant plumes of golden-rod
Twixt the purple asters nod;
Red the sumacs glow.
All the corn is heaped in shocks
And the bluebirds fly in flocks,
Where the gentians blow."

Golden-rod and asters are as much berhymed as the frail forget-me-not, but, every autumn, poets and artists and botanists give themselves up to an annual enthusiasm on the subject, as if the flowers were viewed for the first time. These two flowers seem as if born to set off one another; they are the royal robes of the dying season. They are a fine field for the analytical botanist; both run into so many varieties, all of similar type and differing but little in structure.

Yellow seems the prevailing tint for autumn flowers. This sounds like a fashion item, but it is not. The season wanes in a golden aureole, for leaves and flowers alike offer a thousand variations of this tint. The sunflower and its allies head the procession; the autumn sneezewort (most unromantic of names) lingering with

us as if loath to depart until drear November is here. Then here and there we come upon the girasole, or Jerusalem artichoke, escaped from gardens. It is very common in many localities, and is regarded only as a sunflower by those unacquainted with it as a vegetable; though, truth to tell, Jerusalem artichoke is a misnomer, the adjective being corrupted from the Italian name, girasole.

Actinomeris is another autumn blossom of the same type, though not nearly so handsome. *A. squarrosa* is perhaps the best known form in many localities, though it is very local in habitat. It is not so showy as the sneezewort (*Helenium*), which it somewhat resembles. Indeed, these compositæ of the sunflower class run from one genus into another with such insensible variations that it is difficult, without scientific analysis, to tell tweedledum from tweedledee.

We must not forget, among our autumn beauties, the charming gentians. Gentian does not sound very charming to those who are only acquainted with it as it comes from the druggist, but a cluster of *Gentiana crinita*, the fringed gentian, is one of the loveliest sights in the botanical world; their tender hue is only approached by the blue-eyed flower of memory. And their form, like a delicately-fringed upturned bell, renders doubly attractive their bright azure tint.

The closed genian (*G. Andrewsii*) resembles the preceding, but the corolla is closed at the mouth, giving the idea to the unbotanical that the flower is not matured. Indeed, many people of intelligence, from cursory examination, conclude that this is simply the fringed form before opening fully. By the way, we are indebted to Gentius, sometime king of Illyria, for the name of this flower; he was first guilty of using it medicinally. Taken all round, perhaps, I have introduced my readers to more plants, described from memory, than I should have discovered on our projected tramp. It is rather on the plan of illustrious Bill Nye, who wrote a series of letters from European watering-places while laid up in Laramie with broken bones. However, if the Torrey Club, on their October tramp, did not collect most of the specimens herein described, they might have done so, and here they are excelled by the writer, who accompanied them in imagination, but not in fact.

E. L. TAPLIN.

TENDER BULBOUS PLANTS.

WHEN I first began to make an earnest study of the culture of flowers, many of our most beautiful tender flowering bulbs were not then in the lists of florists and seedsmen, and those that were, were considered exclusively greenhouse or hothouse plants. The amateur who did not possess the facilities attendant upon these, after reading over the elaborate directions for culture upon which the success of certain plants depended, could only sigh in vain for the things that were beyond his reach, for, having but a small sum to invest, he dared not risk his all in what promised to be so rash a venture as

the attempt to cultivate the gloxinia or achimenes in a common living-room.

I well remember my first experience with these two plants. I had seen them in full bloom in greenhouses and greatly admired them, but for several reasons I had never attempted their culture, and the bulbs and seeds commanded a high price. If I couldn't succeed with the one with only ordinary accommodations I couldn't with the other, and besides I remembered their exclusiveness and I had no money to throw away. But after awhile my desire to possess them, to be able to grow them from seeds,

slips or in whatever way they were propagated, overcame my scruples, and I sent to a florist for seeds of each, inclosing stamps for information bearing upon their culture at the window.

The seeds came promptly to hand, and so did the reply. It was brief and to the point. "Such plants are unsuited to the uneven temperature of a dwelling-house, and I conjecture your attempt with seeds will end in failure, as they cannot be successfully grown outside of the greenhouse."

That unpromising reply, instead of discouraging me, acted as an incentive. I was determined to succeed, and when a "woman will, she will," &c. I prepared the soil with the nicest care, heating it to destroy all pests, or what might become such; then worked it until fine and mellow, filled two large shallow seed-pans, leaving the surface smooth and even, then showered the soil to settle it, sifting upon it a little of the dry earth. I sowed the seeds evenly over, pressed them down gently with a smooth surface, then set my pans upon a window-shelf near the kitchen range and awaited results, keeping the soil moist constantly.

In three weeks' time the seedlings began to appear above ground and from the packet of gloxinia I raised over thirty plants. From that of achimenes only ten were brought to maturity, but I was fully repaid, for the yield in both instances exceeded my most sanguine expectations.

In due season they were transplanted into fresh soil and given a position near the glass where the sunshine reached them but a short time during the day. Not having a hot-bed I could not advance them rapidly; consequently I did not get them into bloom until they were one year old.

Since that time until the present day I have made a specialty of growing plants from the list of what are termed "greenhouse seeds;" and my pen has been wielded in the cause of the amateur who has neither greenhouse nor hothouse, for such persons are the ones who need assistance, as there are many difficulties to overcome to successfully rear those plants from seeds in the windows of the average dwelling-house, and which are not to be met with in houses constructed for the purpose with every accommodation for the advancement of plant life. However, we *can* raise fine specimen plants without these houses and their accessories, for patience and perseverance will overcome many obstacles.

'Tis true that plants grown in a room where the fire is allowed to go down at night time require a longer period to mature, but this difficulty may be obviated in a great measure if we can give them the shelter of a hot-bed until the nights, as well as the days, are warm and genial. A hot-bed comes within the reach of all and it is a magic wand in the hands of the florist, accelerating the movements of plant life in a wonderful manner, particularly the gloxinia and achimenes and all gesneraceous plants.

The gesneria I find more difficult to grow from seed, as it is more sensitive to atmospheric changes. Coming into bloom in the winter, the uneven temperature causes the buds to blight ere they are fully matured. I cannot recommend it as confidently as those mentioned above, although it is a most beautiful plant. Neither can I recommend any of these very fine seeds to those careless, indifferent individuals who cannot tell, however much depends, which end up to plant the bulbs when they have any. But to the zealous, persevering amateur, who is willing to take a little extra pains to bring about the desired result, I would say: Plant them by all means; you will find them a delightful study, and learn, as you go along, many important truths that it is almost impossible to tell with the pen.

The tydæas, a section of achimenes, I have had little experience with; they should not, however, be dried off when resting like achimenes, but given moisture enough to keep the foliage from wilting, and also kept in the light. Directions for propagating the gloxinia from the leaf were given in the CABINET for February. I will add that cuttings from the branches root quickly in moist sand in a sunny window, and will bloom in a short time; and the same may be said of achimenes, and more, its little scaly tubers are multiplied rapidly. Both these plants love shade and moisture, and a warm genial atmosphere while growing and producing their flowers. They will suffer if exposed to full sunshine or if kept too dry, and they will be finer specimens if care is taken when watering not to wet the foliage, particularly the velvety leaves of the gloxinia. Some varieties of the achimenes will come out of the shower-bath with a new lustre to the foliage if not exposed to the sun; but varieties with thicker, rougher leaves should not be treated in like manner. But the genuine flower-lovers, with a little practical information, will soon learn to decide these points for themselves.

MRS. G. W. FLANDERS.

OUR NATIVE PINK WATER-LILY.

I WAS greatly surprised in reading an account of our lovely water-lily (*Nymphaea odorata*, var. *Rosea*) in *Gardening Illustrated*, and can only infer that the correspondent has not the true variety, or, at least, that he has it mixed with the common white. It is described by the writer as "ivory-white, except at the base of the central petals and over the lowest whorl, where they are rose-tinted." This is only a very common

variety of our water-lily, which is often sold for the true variety. I have two large ponds full of the genuine *N. odorata rosea*, opening every day from twenty to fifty flowers, and an exquisite sight it is. There is nothing white about it, and I might say or pink either, for the flower is not pink, but the loveliest tint of carmine, from the deepest blush to a pure carmine, entirely free from the pinky character of flowers usually

described under that color. In fact, it is the extraordinary, rare and peculiar color that gives it much of its value—a color I never saw in any other flower but the carmine blossoms of the Mrs. Anna Maria Hovey camellia. It never produces—or rather, I might say, never has produced—a white flower, and I have had it under cultivation ten years. I have seedlings from it, some of which flowered last year and others not until the present one. Among these seedlings I noticed for the first time last week a white one, and at the same time another flower so deep in color, and so strikingly beautiful, that I have given it a name and shall increase it as soon as possible. In common terms, it may be said to be twice as deep in color as the original variety. I have no doubt that the climate of England is too cold to grow it successfully in the open air—that is, to flower it abundantly. When the night temperature here ranged from 80 degrees to 70 degrees, the ponds were covered with flowers

open at sunrise. When the temperature ranged from 65 degrees to 55 degrees the flowers did not open until nine or ten o'clock, and then not half the number as on the warm nights. The Swedish lily (*N. alba rosea*) may truly be called a pink lily, for the centre petals have so much purple intermixed in the petals that it appears a pink flower, and growing side by side with our *American rosea* you see at a glance what there is in color that you cannot describe. The Swedish is a very handsome lily, but to compare it with the American would be to compare the rosy blush of the fairest English damsel with the ruddy crimson cheek of our Indian squaw. It is a wonderfully prolific bloomer. During the summer I pulled up two roots, on one of which were three nearly full-grown buds. It flourishes freely in a shallow pond, three feet deep, with one foot of good soil.—*C. M. Hovey in Exchange.*

FLOWER NOTES.

IT is well at the close of the season to take notes of our successes and our failures, that we may profit by them in the future. True, we are not always responsible for the failures; influences over which we have had no control have tended to hinder success. But there are usually mistakes of our own; a want of proper planning or arrangement resulting in a lack of harmony, or scarcity of flowers in some department, now made so apparent that we may correct it another year. It may be that some stock their garden after the same pattern year after year; the geraniums always have just such a position; the phloxes, the verbenas, the petunias, &c., invariably grow in the very same place. Now, we do not admire this stereotyped way of doing things after the same model, and so we always make changes in the setting out of annuals and the house plants. We also try every year some new things, and if worthy perpetuate them; if of little account, discard them next year.

One of our mistakes last year was the setting of perennial larkspurs in the foreground of a lily bed. It was through ignorance we did it. We did not know what the seedlings were. Dear me, how those larkspurs did grow this season! Gigantic plants, overtopping everything and pushing the slender lily stalks aside that they might make a grand spread! They were very handsome indeed; full of spikes of bloom, six varieties, but they were not in their proper place, and now they must be taken up and put in the background, where they may grow as ambitiously as they please without encroaching on the more slender and lovely plants.

Another mistake was in filling a new bed somewhat in the rear with choice seedlings. These have grown luxuriantly, the tall zinnias, not the coarse kind, but fine-leaved, perfectly-formed flowers of divers colors, and the lovely low-growing, widely-branching *Zinnia Haageana*, with its small golden-yellow blossoms borne in great profusion. Have you ever grown this novelty? If not,

be sure and buy a packet of seed next spring. In that bed there grew luxuriantly the curiously marked flowers of the salpiglossis, almost hidden by the masses of dwarf morning-glories, purple and blue and white, with their yellow eyes. How pretty they all were when one could get a sight at them by going around the bed into the grass! There, too, were such thrifty camellia-flowered balsams, all colors, and the tall and graceful scabiosas from almost black tipped with white through dark and lighter tints to the delicate shades, and beside them, in striking contrast, the brilliant calendula Meteor, a charming flower, blooming from early summer till hard frosts. Nestling in the foreground was a clump of the new mignonette, "Machet," rivaling our pet, "Golden Queen," in its dwarfness, compactness and size and beauty of its heads of bloom, the one golden, the other red. (Make a note of these.) There also grew the æsthetic schizanthus, with its delicate fern-like foliage and butterfly flowers. This is one of the loveliest annuals.

The latter part of August, right in the midst of all this varied beauty, the asters began to bloom, mixed sorts, Truffant's Peony, Washington, Chrysanthemum, Dwarf Bouquet, Imbrique Pompon and Victoria. "I never saw such beautiful asters!" exclaimed the admiring beholder. Each had a beauty all its own, but the quilled, with white centres, especially the purples, were very lovely through September, for then they were in the height of their perfection. If you would know all the exquisite beauty of the aster you must sow all of the varieties. Every spring I sow a mixed collection, embracing twenty varieties in every hue, and then two or three packets of one sort. A collection packet costs twenty-five cents, and is the cheapest of all.

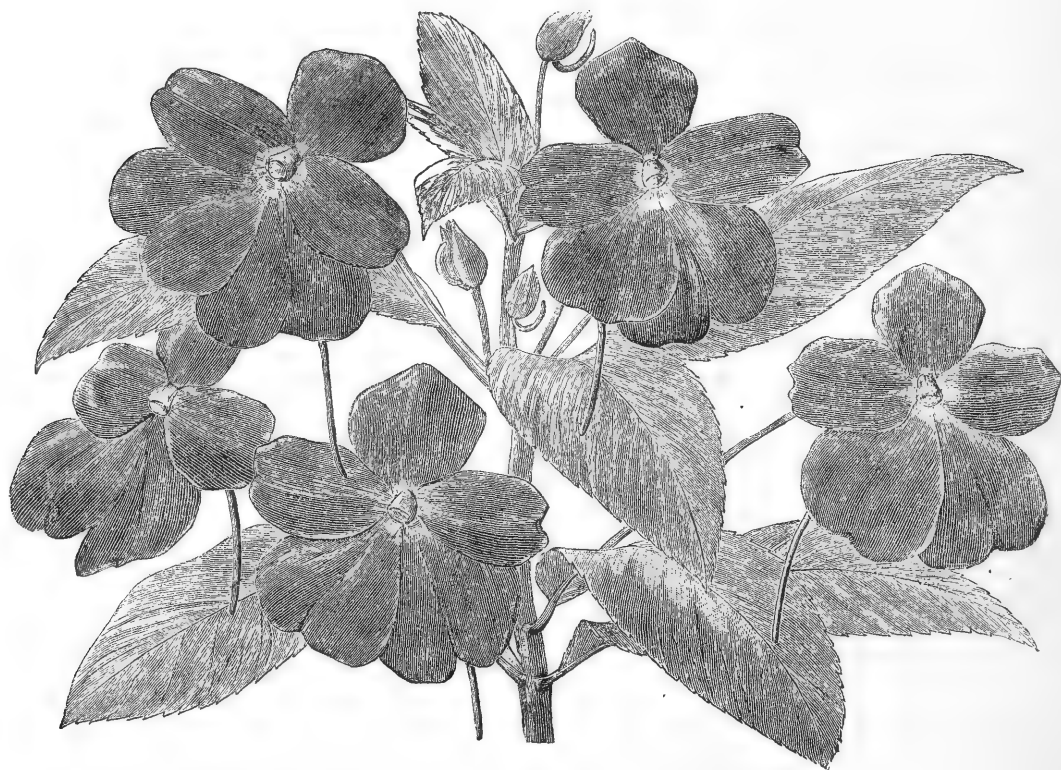
But I must not forget to tell you of another attraction of this background bed. Towering five feet in height are plants of *Cosmos bipinnatus*, new to me this year. What the florist says of it is true: "The foliage is per-

fectly elegant." A few of the dwarf variety began to blossom early in August, but the tall plants are just showing buds, and were it not for what Mr. Childs says about it I should despair of seeing them bloom: "October frosts do not hurt the plants or flowers and during that month it is the gayest and most showy plant in cultivation. It is pronounced by all to be the finest seed novelty in many years." It is certainly very handsome as a foliage plant, branching largely, and when covered with its white, pink, crimson and maroon flowers "three inches

across," at a time when Jack Frost has marred most others, it must indeed be a grand sight. I am glad that I have a clump in a front bed also, where I can see them from my window.

Now, I have not written thus fully about that secluded bed, the most constant and full in its varied attractions, merely to inform you of my blunder, but to call your attention to the desirable flowers with which it is stocked, so that you may make a memorandum of them for your benefit another year.

MRS. M. D. WELLCOME.



HAWKER'S RUBY BALSAM (*Impatiens Hawkeri*). Flowers deep carmine.

HAWKER'S RUBY BALSAM.

IF this brilliant novelty surpasses *Impatiens Sultani* it is indeed truly valuable. While the species are not likely to become useful for market purposes, as the flowers do not "make up" well, yet they possess real beauty, and will be cultivated and encouraged for this reason and not because the plant will enrich its possessor by its popularity.

The *Gardener's Magazine* describes the plant as "conspicuous among the many good things that have been introduced to cultivation by Mr. William Bull, of King's Road, Chelsea, England.

"Being more massive in habit and more showy in flower it surpasses in beauty the beautiful and popular *Impatiens Sultani*, and will certainly take an important place among fast-growing and easily-grown plants adapted for exhibition. It is a native of the South Sea Islands, and takes its specific name in honor of Lieutenant Hawker, who

discovered it. The growth is that of a freely branching bush, well furnished with serrate elliptic leaves of a full green color, amid which appear, in sufficient abundance to produce a rich effect, the large, fully-expanded flowers, of a rich ruby color as seen from a distance, but when closely inspected they are seen to be of a deep carmine, tinged with violet, round a small white eye. The spur is two inches long, the color red.

"Like the plant it is compared with above, which it certainly surpasses, it may be had in flower at all seasons of the year, but its season is from April to October. Properly speaking it is a fast-growing stove-plant, but it may be turned to account as a warm greenhouse plant for summer flowering, and may rank with the useful subjects that may be depended on for a fine display with but a reasonable amount of good management."

WILD ROSES.

PART II.

ROSA ALBA comes to us from Denmark and Saxony and is rare in cultivation here, although few single roses equal it. The flower is delicately fragrant as well as large and in the main is of a pure white color. It is a little hard to propagate, but could be grafted readily on any common stock. Several fine garden roses, among them Bouquet Blanc and Coquette des Alpes, have been raised from this species.

Rosa canina, the dog-rose, which has a little of the sweetbrier look, but without the aromatic glands in its leaflets, is a native of Europe and North Africa. It is not uncommon here, and has escaped from cultivation in places. But its large blossoms of pale pink and the scarlet hips which cling to the shrub long after the leaves have fallen commend it for use in every extensive shrubbery. It is much used in Europe as grafting stock.

Rosa rubrifolia derives its name from the rich claret-colored foliage, which holds its bright tint through the hottest of our summer weather. None of the so-called purple-leaved shrubs equal it in the beauty of its coloring and its unfading quality. A bed here containing several hundred plants excites the admiration of all who see it. The petals of its flowers are a deep red, shading to yellowish white near the base. The fruit is dark red. It has some marked varieties, the most striking one being named Lurida. It is rather hard to propagate from cuttings, but if one is content to wait it can be had surely from the seed, which germinate the second season after planting. Southern Europe is its original home.

Rosa Sinica comes from China, as its name implies. But it was taken to Europe 125 years ago, and from thence planted in Georgia and South Carolina before the Revolution, where it has made itself particularly at home, and under the name of the Cherokee rose is found abundantly in the wayside hedges. It is a rampant grower and, clambering into tall tree-tops, flings out branches twenty or thirty feet long, which swing in the wind and when covered in spring with its pure white flowers and glossy leaves is a most beautiful plant. It is found sparingly in the Boston market in February and March, but occupies too much space under glass to be very profitable as a commercial flower. I think it might live here out of doors, if laid down upon the approach of freezing weather and covered well with loam.

Rosa rugosa, the Ramanas rose, also comes from China and Japan, and is one of the very best of the hardy species introduced to our gardens. It is good in every way—in habit, flower, foliage and fruit. The leaves are dark green, tough and durable. The flowers are large and fragrant and they vary in several distinct varieties from white through pink and rose color to deep purple. The fruit, too, varies much from the size of a common rose hip to that of an average crab-apple, and the large ones when ripe are not unpleasant eating, besides being attractive in color. A double variety has been produced,

but it is uninteresting—not at all what one would hope from a parent with so many admirable qualities.

Rosa bracteata is another species from China, long naturalized in our Southern States, where, like the Cherokee rose, it makes an admirable hedge plant. It is called the Macartney rose, from Lord Macartney, who introduced it to English gardens near the close of the last century. The pure white of its large flowers, with their bright yellow cluster of stamens, is very effective against the dark evergreen foliage. I have a few plants started and hope to winter them by earthing well.

Rosa cinnamomea is the cinnamon rose, whose pale red, cinnamon-scented flowers were common in old gardens. It is a European rose, but is naturalized and flourishes in large patches by many of our roadsides. It is not showy, but its fragrance commends it.

Rosa Gallica is the old French rose, with flowers red, crimson or white, and the purest of many garden hybrids. It blooms during June and July. A few years ago I came upon a large mass of these roses on Red Hill, in New Hampshire, and so far from any habitation that I wondered how they came there. But I learned on inquiry that a French family had once settled there and these roses were probably survivals from that garden in the wilderness.

Rosa acicularis is the name under which we received a plant from Russia. The name is probably incorrect, but it proves to be one of the earliest of the deep-colored kinds. It covers, too, a long period of bloom and its ornamental fruit makes it one of the best of shrubs for autumn decoration.

A rose from Bokhara, whose specific name is doubtful, is one of the few species that bloom perpetually from June till November. Its small white flowers come in large clusters, and all summer long it shows ripe fruit and fresh flowers together.

Rosa tomentosa, a large, rambling shrub, is admirable for hedges and where a good barrier or screen is wanted. *Rosa repens*, a trailing species from Germany that grows ten or fifteen feet in a season, is admirable for rockwork on account of its flexible and willowy growth. *Rosa ferox*, from the Caucasus, derives its name from the strong, straight prickles with which it is armed. I have named only the most distinct and worthy of cultivation, and my purpose is served if I have given any idea of the wealth of beauty in form and color which these neglected single roses possess. There is no need of speaking with disparagement of the roses which the gardener's art has produced, but surely these children of nature deserve some place in our scheme of ornamental planting. Already we have one hundred and sixty species and varieties planted, many of which have never yet shown flower. Each year brings additions to the list, and I have no doubt that one of the most attractive parts of the arboretum will be these beds of wild roses.—*Arnold Arboretum*.

IN THE GARDEN.

WAS it thou, Mignonette?

For while the south wind stills his low complaints
To bear the censer of thy rich perfume,
I read, upon a terrace warm with bloom,
Flower stories of the Virgin and the saints.
I read that Mary, passing through a field,
Her heart oppressed with that mysterious gloom
Which ever falls on those whom heaven has sealed
For glory's crown—and doom—
Stooped often, in her meditative walk,
To pluck some favored blossom from its stalk,
Some happy flower, which bowed its beauteous head
And summer's odorous benediction shed.
But one poor fragile weed,
Nor beautiful nor sweet,
Which she would never heed
But that it clung so close about her feet,

With tender touch she gathered; to her breast
And to her lips the slighted floweret pressed.
Because so frail, so hopeless, loved the best!

Oh, then the pale weed strove
To whisper forth its rapture and its love;
And while it mutely trembled and adored,
Like praise of spirit risen
From long and woful prison,
A tide of fragrance from its heart was poured!
Nor once in all the ages has it sighed
For beauty's coronal of brilliant hue,
Red of the rose, or violet's winsome blue,
By that one kiss of pity glorified.
The garden's lowly, well-beloved flower,
A miracle of sweetness from that hour—
Mignonette, was it thou?

—Frances L. Mace, in *Harper's Magazine*.

HARDY PERENNIALS FOR CUT-FLOWERS.

ALL hardy perennial herbaceous plants that yield blossoms suited for cut-flowers for house decoration are also desirable decorative garden plants, but the blossoms of all perennials suitable as showy garden plants are not always fit for cut-flowers for indoor use. Cut-flowers should be showy and effective when massed, of bright and decided color, and good, lasting nature. Flimsy things like columbines are too easily crushed and disfigured, everything that touches it sticks to fraxinella, speedwells have not character enough, perennial bellflowers mass poorly, the Japan gold-banded lily is overpoweringly fragrant, and so on with many other disqualifications.

A mass of lilies or a bunch of coreopsis is beautiful in itself, but a conglomeration of many kinds of blossoms in one vase is distasteful and displeasing. Therefore, for cut-flowers we should have common, everyday, easy-to-grow, vigorous and copious plants, as lily-of-the-valley or pæonias, and we should endeavor to have a sufficient variety to keep up a supply of blossoms from April till October. Of course we have admirable adjuncts in the way of annuals, biennials, shrubs and tender plants. The following are good, common perennials, all of which should be grown in quantity for yielding cut-flowers.

About the middle of April the early tulips come into blossom, and are succeeded by numerous varieties till they finish up with the parrot tulips in the third week in May. About the first of May the old-fashioned daffodils appear, and a little later the poet's narcissus. The large white-flowered trillium, the blue Virginia lungwort and the pink spring orobus are also in bloom about the first of May and last in good condition till the middle of the

month, when the charming lily-of-the-valley takes precedence over most other hardy flowers. About the middle of May, too, we have spring irises of many shades of blue and yellow, arching sprays of bleeding-heart, and the large white barrenwort. In the third week in May the yellow lady's-slipper begins to bloom, the narrow-leaved yellow day-lily (*hemerocallis*) is at its best, and the slender-leaved pæonia is brilliant and beautiful.

About the end of May and the first of June we have several kinds of lady's-slipper (but not yet *Cypripedium spectabile*, which is the latest and finest of them all), the fragrant white iris (*I. Florentina*), many forms of German irises, and Solomon's-seal. A little later on, herbaceous pæonias of many shades of pink and crimson, the double white *Spiræa filipendula*, the common yellow day-lily, the earlier true lilies, as *Lilium Davuricum*, *L. Scovitzianum*, *L. tenuifolium* and *L. croceum*, and the garden pinks follow in quick succession. Toward the end of the month the double-flowered *Lychnis Viscaria*, panicked gypsophila, double feverfews, perennial larkspur, the showy lady's-slipper, and several other lilies, for instance, *L. Martagon*, *L. pulchellum*, several forms of *L. elegans*, and *L. Hansonii*. Also the erect clematis, the lance-leaved coreopsis and the golden anthemis.

On entering July we likewise have the pink spiræa (*S. venusta*), brilliant bee-balm (*Monarda*), orange butterfly-weed, purple and white everlasting peas (*Lathyrus latifolius*), several species of showy statice (but not yet *S. latifolia*), Kæmpfer's irises, and many kinds of lilies which appear in about the following order: Common white, red or yellow Canada, *L. testaceum*, *L. Chalcedonicum*, the trumpet-flowered and Bateman's. July is also the month of tawny day-lilies and showy yuccas.

The fragrant David's clematis and panicked phloxes attain greatest perfection in August; so do our great swamp-lily, tiger-lily and speciosum lilies, together with white eupatorium, creeping milkweed (*Euphorbia corollata*) white day-lily, tritomas, the broad-leaved statice and a host of showy members of the sunflower family.

Into September pass many of the earlier flowers and showy composites, but choicest of all are the lovely Japanese anemones. I may also mention as in good condition still, speciosum lilies, tritomas, fountain-leaved and Maximilian's sunflowers, mist-flower and eulalia grasses. —*Philadelphia Weekly Press*.

CARDINALS AND INDIAN PIPE.

IN a late rural walk I found cardinal flower massed by a small lake like a party in the bright, fashionable robes of the season, come down to the shore to hold a fête. The still waters mirrored them, the rich background of pines hymned low, sweet music, while birds thrilled the clear, pine-scented air with notes so glad, so intense, or so far away, as to make one start with a sudden joy, or dream of Tennyson's idyls, with their outdoor charm and freshness, that have such a flavor of the old Sicilian bard Theocritus, that one forgets, in reading them, that the scenes are laid in merry England, rather than in the far-away age of Greek mythology and song. It is almost like seeing cardinal flowers for the first time, I said, ere the festive scene with which imagination had invested the spot had yet faded from my mind.

"Do you come over the ridge often from your home?"

I asked of the two bright-faced children who led the way.

"Yes; we come here to make mud-houses."

"How charming! That is the essence of child happiness." With a quick intuition that I sympathized with them in their pleasures, they led the way to them while I was thinking that they had gone farther than I; for while I had only peopled this lovely place they had improvised houses for my guests. They were creditable architectural structures, evoked from the clayey soil, low, wide and rambling, with tiny or broad windows, like the houses of the period, over which the rich-hued flowers waved their scarlet pennons, giving an Oriental effect of coloring. "How very lovely!" I said, "and very artistic. I will not disturb your shrubberies," and I went some distance beyond to gather my flowers, and what a gorgeous bouquet they made! *Lobelia cardinalis* (cardinal flower) is a stately plant, with stem from two to four feet high, thickly set with dark green sessile leaves that in form are oblong lanceolate, finely serrate, with a superb terminal raceme of deep scarlet flowers. The tubular corolla, two inches long, is cleft, the upper lip with two recurved segments, the lower one three-lobed, wider and drooping, showing its velvety texture, and making more effective the stamens, the anthers of which cohere in a ring around the style, the stigma being encircled by a soft fringe.

They are the most brilliant wild-flowers of mid-summer, the most striking ornament of sluggish streams and lake borders, where cluster at this season so many lovely blooming plants, and in their wide range make gay many brooksides from Canada to the Gulf. White, rose-crimson and blue cardinal flowers have been found. Dr.

Gray thinks the forms found in the southwest of the Mississippi belong to another species. This plant is truly American. It was found in Canada by the early French colonists, who sent it to Parkinson in France, from whom it received the name Cardinal flower, and was one of our earliest native plants noticed by eminent botanists in England. It belongs to the Lobeliads, of which there are two genera, and of the ten species included in the genus lobelia nearly all are found on the borders of streams. Water lobelia has leaves in a radical tuft, one to three inches long, submerged as well as the stem, which is usually solitary, frequently with a few scales or bract-like leaves. The lovely drooping racemes of blue flowers on slender pedicles appear above the water like a naiad that lifts its head for a few months to the air and sunshine out of the cold, dark waters that are ever its home. Indian tobacco, *Lobelia inflata*, is a small plant sprinkled about in fields and woods, its erect stems much branched and the small, pale blue flowers clustered in leafy spikes that attract the eye until late autumn. The poisonous principle that pervades all the family is very marked in this species.

Later we went strolling through the fragrant pines and heavy woodlands beyond, whose dense foliage made a grateful twilight that the diffused rays of the sunlight lifted in places, flecking the ground with a joyous light and shade. Here I found *Monotropa uniflora*, familiarly known as Indian pipe, whose waxy flowers looked as if the Indians might have left them here with the ashes yet in the bowl. What an odd fantasy of nature these flowers present, with the clay-like stem bent to take the creamy white flower that in form exactly simulates the bowl of a pipe rimmed with the smoke and blackness of continued usage, and the stem slightly grimed! In these specimens the four or five petals that made the bowl had a tinge of pink exquisitely delicate that was repeated on some of the bract-like leaves. This curious plant has much the aspect of the parasitical obovobanche, except in the structure of the flowers, but no connection has been traced between the roots of the monotropa and that of the trees beneath which it is found, and Mr. Newman suggests that the plant may derive nourishment from decaying and not from living vegetable matter, in the same way as fungi do, for which green leaves would not be necessary. *Monotropea* is a sub-order of *ericaceæ*, to which the beautiful heaths belong and whose flowers in trailing *arbutus* signal the returning spring.—*J. S., in Boston Transcript*.

HYACINTHS.

MANY growers as well as amateurs who have failed to flower hyacinths at Christmas often wonder how large quantities of bulbs are treated. The *Horticultural Times* describes as follows the method used by one of the most successful growers of hyacinths in Europe:

"The bulbs are potted early in September in a compost of fresh loam and sand in the proportion of two of the latter to ten of the former, to which is added an equal quantity of rich soil which has been once used, but which contains enough fertilizing matter to leaven the whole—the hyacinth, despite assertions to the contrary by our gardening contemporaries, not requiring very much assistance in this respect—the chief object being to secure sound bulbs in the first place. When the bulbs are potted they are set on beds of ashes and covered all over at once with cocoanut fibre to a depth of between three and four inches. About the middle of November the beds are uncovered, and all the kinds enumerated below, which are started about one inch out of the bulb, are placed in a house, the temperature of which is kept at about 60°, with a rise of 10° for sun heat. In about a month *Homerus* and *La Precosa* are in bloom, followed by *La Tour D'Auvergne*, *General Pellissier*, *Amy*, *Blanchard*, *Grand Vedette* and *Charles Dickens*, and although not so fine as those that come later, yet they are beautiful objects, and form an important factor of the enormous flower trade. On this subject the following remarks are also worth notice: There is no necessity to use any special make of pots for hyacinths, but it is very desirable not to have them too large, as, however fine the flower spike may be, if the plant is growing in a pot exceeding five inches in diameter it will not look well. In no case should six-inch pots be exceeded; on the other hand it is wrong to suppose that bulbs require very rich soil and a small amount of root space only. Clean pots are desirable, and a moderate quantity of drainage. When potting, the soil should not be pressed very hard below the base of the bulb, but it may be made as firm as hard pressing can make it on the surface. Experienced growers are aware that if the soil is much rammed below the bulb the roots cannot readily penetrate it, and then the bulb is uplifted from its seat by the roots and

forced upward; if, on the contrary, the roots find a fairly open medium, they readily descend and fix the bulb in the position in which it was placed. The following are the names of some good hyacinths, arranged according to their various shades of color. The single varieties are for the most part preferable to the double ones, but there are among the doubles a few so meritorious in point of color that a limited number of them is given. Double reds of various shades comprise *Bouquet Royal*, *Czar Nicholas*, *Koh-i-noor* and *Lord Wellington*. Single reds: *Charles Dickens*, *Emmeline*, *Madame Rachel*, *Norma*, *Robert Steiger* and *Von Schiller*. Double whites: *Anna Maria* and *Sceptre d'Or*. Single whites: *Alba superbissima*, *Baroness Van Tuyll*, *La Candeur*, *Grand Vainqueur*, *Madame Van der Hoop*, and *Voltaire*. Double blues: *Blocksberg*, *Garrick*, *Van Speyk* and *Lord Raglan*. Single blues: *Argus*, *Baron Van Tuyll*, *Charles Dickens*, *Czar Peter*, *Grand Lilas*, *King of the Blues*, *Uncle Tom* and *William I*. Single yellows: *Bird of Paradise* and *Ida*. As soon as the bulbs are potted they should be taken to a position in the open, where the pots can stand on firm bottom, so that worms cannot enter them. Place them close together, and then cover them with a thick layer of either cocoa fibre or coal ashes. Fibre is preferable, as it is much cleaner than ashes. Whatever material is used to cover them must be of sufficient thickness to prevent the bulbs from rising when they begin to make roots. A layer of coal ashes, three inches higher than the pots, seems to be all that is required. Six weeks is the usual time allowed for them to remain in darkness, but in the case of bulbs not required to flower early, a week or two longer under the covering will do them no harm. Whenever they are uncovered they should be taken to a cold pit or frame, and be gradually inured to light. From this pit they may be drafted to the forcing or green house as desired. Hyacinths are much benefited by frequent supplies of liquid manure. The length and size of the flower spike is thereby increased, and moreover a darker shade of green is given to the leaves. Those required to flower early should be introduced into a warm greenhouse temperature early in November, and the heat should be raised gradually to 65°, which will bring them into flower early in January, if not before."

BEAUTIFYING RAILWAY EMBANKMENTS.

MANY of our railroad corporations have been doing themselves great credit, and the community great good, by the encouragement they have given floriculture, in laying out and planting the grounds around their depots. In England this work is carried on to a great extent, as may be seen from the following comments:

"We have repeatedly advocated the utilization of rail-

way embankments for horticultural purposes. From any point of view—whether for practical purposes or for merely making long railway journeys a little less monotonous—the cultivation of miles upon miles of weed-covered and dreary-looking embankments is much to be desired. In Norfolk the neat little gardens on this waste land, much of which is soil specially adapted for fruit-growing,

show on a small scale what could be done in this direction, and quite upset the theory that the continual passage of railway engines prevents cultivation. An example of what may be done amid the smoke of locomotives is shown at the present moment by the pleasant little oasis at Eastbourne station, where actually within a yard of a grimy row of trains in perpetual motion there are in bloom some magnificent beds of flowers, which would 'knock' some of our most carefully tended rural gardens or the hotch-potch flowering of our London parks 'out of time.' Well done, thou good and faithful station-master of Eastbourne; thou art—we know thee not by name—evidently a lover of Nature in the best sense of the term.

"And if flowers, why not fruit and vegetables? If we

can please the eye by properly cultivating railway land, why not also satisfy the stomach by the same media? The thing can be done, nay, is being in some places done to some extent. Why do not the railway companies allot, say, 50 to 100 yards to each of their employees and give prizes for the best kept plot? Waste land of any kind is an offence against the wisdom of Providence in a country like ours. If we can't give Hodge three acres and a cow let us try to secure 100 yards of waste land to the railway porter in addition to his scanty and hard-earned wages. By this means the companies could give away what they don't use themselves, and at the same time please their passengers by giving them pleasant vistas to gaze upon from the window of the train."

ROSE GOSSIP, &c.

I HAD met with so many heart-burning disappointments in ordering roses, owing to the great uncertainty of receiving them true to name, that last autumn I formed the desperate resolve to send an order to England, and in consequence of which I received from Paul, of Waltham Cross, fifty very fine plants of new and choice varieties, two and three years old, which had been grown in the open ground.

I had braced myself to pay pretty dearly for the "whistle," but was most agreeably surprised to discover that, after paying ocean freight, custom duties, and a few incidental expenses, the roses cost me less than dealers here demanded for plants of the same description, while none offered so choice and extensive a list from which to make a selection. But even had the roses cost double the price, the certainty and delight of having accurately named varieties would amply compensate a real lover of roses for the difference in cost. With the exception of half a dozen plants, they all bloomed this season. To be perfectly frank, perhaps I ought to explain that the "half-dozen" failed to bloom for the reason that they died. However, this was not a large percentage of loss in an order for fifty plants. The others made a fine display, and among them were several sorts I had never before seen, one of which was *Pride of Waltham*. This rose has never to my knowledge been extravagantly, nor even adequately, praised, a state of things at which I marvel, considering its extreme beauty and the unstinted commendation so often awarded to very inferior flowers nowadays. But as it was only introduced in 1881, I suppose it is not yet thoroughly disseminated. It is large and beautiful in form, of an exquisite pale rose or flesh color, shaded with a deeper tint, and retains its beauty for several days, in this respect surpassing the much-admired *Mlle. Eugenie Verdier*. The latter is the beau-ideal of a rose when just on the point of opening, but its beauty is very fleeting, of a few hours' duration at best, and when fully expanded it is an ordinary rose indeed. *Julius Fenger*, of nearly the same color as *Captain Christy*, is yet altogether distinct in shape, being finely cupped, while the latter is flat. It may be remarked of both that,

like most light-colored roses, their beauty is lasting, the flowers being quite presentable for several days. *Julius Fenger* displays this quality in a conspicuous degree, and, as the buds open very slowly, it passes through an infinite number of lovely gradations of form, assuming each day a new and still more enchanting grace, until at last it stands in the full flush of its blushing and unrivalled beauty.

Charles Darwin proved to be a first-class dark rose, unique in color, crimson with an original and peculiar brownish tinge. *Madame Eugene Verdier* is very pleasing, a large globular, rose-colored flower. *Egeria*, though small, is excellent and distinct, salmon-rose, with petals most regularly and beautifully recurved. *Lord Bacon*, a very brilliant crimson rose, gave a few highly-finished flowers. *Madame Gabriel Luizet* was altogether charming, and bloomed with greater profusion than any of the others; the plant was well branched, and when pruned presented a flat surface on the top, which was crowned with a dozen large pale-rose flowers, making an effective display. This variety, with *Ulrich Brunner*, *Rosy Morn*, *Maurice Bernardin*, *Lyonnaise* and *Pierre Notting*, were persistent bloomers, giving flowers into October. *Pierre Notting* is a rose of great substance, very double and of superb form; in fact, it is too solid and heavy to be well upheld by the stems, which weakness mars the effect of its appearance. *Xavier Olibo* was sluggish in starting into growth in the spring, consequently did not possess sufficient vitality to produce flowers worthy of its reputation, but I had the privilege of seeing in the garden of a lady amateur, who had sent a joint rose order with me, a specimen of *Xavier Olibo* of wonderful beauty, a gorgeous vision of lurid dusky crimson, shaded with soft, velvety black; it is of sumptuous form and faultless symmetry of outline, in a word, the utmost perfection of all dark roses. In the same garden I was shown a magnificent specimen of *Merveille de Lyon*, which is a rose of most astonishing capabilities, when vigorously established; it was massively full and beautifully perfect in form and finish. Like all members of the *Baronne de Rothschild* family it holds its flowers firmly erect, a characteristic,

by the way, which seems to be prominent in all the high-bred roses of recent date. In addition to the English roses I also received through a friend a smaller lot of plants from Mr. Saul, of Washington, among which were two plants each of Her Majesty, American Beauty, Madame F. Bruel, Secretaire Nicolas, Mlle. Julie Gaulain, &c. These plants have made the most astonishing and vigorous growth of any that I have ever received. Though the plants were rather small on arrival, yet the majority of them have thrown up strong shoots five and six feet in height, an astounding result, for which I can only account by believing Mr. Saul to be a veritable magician, in addition to being, as he certainly is, the most genial, high-minded and generous of florists. American Beauty has proved to be with me an excellent outdoor rose, has bloomed continuously, producing immense flowers of penetrating and delicious fragrance. Its manifold perfections will be completely crowned should it prove to be a hardy sort, or even to be as robust as La France.

Only one variety received from Mr. Saul made indifferent growth; that was Her Majesty, and I was somewhat disappointed. One of the plants grew to the height of two feet and a half, while the other "grew smaller by degrees, and beautifully less." They were grafted, and I fancy the briers must have been intensely democratic, consequently bitterly opposed to monarchical institutions, for plant No. 2 kept continually throwing up vigorous protests against supporting Her Majesty, in the form of pointed red republican suckers. This underground revolution was kept up throughout the season and the Munroe doctrine applied with such pertinacity that at last the royal usurper began to visibly decline, and finally ingloriously abdicated by giving up the ghost. Possibly this may have simply been an application of the Salic law, for my Emperor of Brazil, similarly situated, flourishes in great state.

I discovered this season that the penstemon is a very desirable flower. Among a lot of bulbs and seeds received last spring from Lemoine was a packet of penstemon seed saved from his unrivaled collection of named sorts. They were sown in April, and the plants were in full bloom in September, thus showing it to be an annual as well as a perennial. The lovely, open, gloxinia-shaped flowers come in various shades of crimson, purple, maroon, lilac, mauve, pink and vivid rose, some with white throats, others self-colored or delicately veined. The spikes of loosely-arranged flowers possessed the graceful habit and simple refined beauty so characteristic of lovely wild-flowers, while the size, symmetry and brilliant tints betrayed the high-bred qualities fostered by careful selection and the patient art of the skillful professional florist. Those familiar with the penstemons of ten years ago will be surprised to note the vast improvement intelligent culture has accomplished.

Lemoine's hardy gladioli are a great acquisition, being the result of crossing *G. purpureo-auratus* with fine sorts of *G. gandavensis*. They are quite distinct from the latter, most of them producing very open flowers with broad petals. As a rule, they do not equal in size the better sorts of *gandavensis*, yet they surpass them in

richness and striking contrasts of color. Nearly all display a very large and conspicuous blotch of purple, scarlet or dark maroon bordered with golden yellow, which markings at a little distance give them the appearance of lovely orchids. The varieties that have bloomed with me this season are John Thorpe, a superb flower; Incendie, a fine sort; Marie Lemoine, an exquisite orchid-like flower; Enfant de Nancy, exceedingly rich in color, purplish-crimson, with velvety black shadings; nothing in the *gandavensis* section can compare with it in richness of color; L'Abbé Gregoire, very fine; Rochambeau, a good sort, and Lafayette, a salmon-colored flower with purple blotch. In this variety the *gandavensis* type predominates. This class of gladioli is termed "hardy," but I have not had sufficient faith to test the matter; however, the lady amateur to whom I have referred made the daring experiment last winter, leaving in the open ground a small clump of John Thorpe and another of *gandavensis* sorts; the latter is usually counted tender. Strange to say, the hardy John Thorpe "shuffled off the mortal coil" so effectually that not a committee nor even the entire Society of American Florists could have brought him back to life again, while the *gandavensis* came out of the ordeal unscathed and pushed forth in the spring with unwonted vigor. In consequence of her experience the lady amateur's formula for the winter treatment of gladioli stands thus: "Hardy gladioli are invariably tender, while tender gladioli are perfectly hardy."

I have had the very lively pleasure to plant and to see in bloom six of Allen's seedlings, to wit: Emma Thursday, Bayard Taylor, Stanton, Emerson, Thoreau and John Thorpe. The latter is by far the most floriferous gladiolus I have ever seen, a single corm having given seven magnificent spikes of flowers; the color is striking, a brilliant scarlet with white stripes down each petal. Thoreau is a grand and very attractive sort; Emerson, a long spike of pure white flowers with large crimson blotch; Bayard Taylor, a symmetrically arranged spike of beautiful yellow. They are all first-class flowers and cannot fail to be highly appreciated by flower-lovers.

What a glowingly gorgeous flower the Oriental poppy is. Nothing can surpass the vivid intensity of its dazzling vermilion-scarlet flowers. The rich, chenille-like fringe of plum-colored stamens and the black blotches at the base of the petals add much to its beauty and splendor. I never had seen it, but having heard it highly spoken of sowed a packet of seed two years ago. Taking a stroll in the garden one June morning, I saw two little French boys peeping over the fence, when one exclaimed with great vivacity: "*Regardez donc cette belle fleur rouge-feu.*" I turned in the direction indicated and saw across the garden flame-colored flowers nodding in the breeze. Nearer inspection revealed the fact that they were my long-looked-for poppies, and for once at least my expectations were surpassed by the exceeding richness of the flower. It is a hardy perennial and a great acquisition for the herbaceous border.

That grand, old-fashioned flower, the Canterbury-bell, is not grown to an extent in keeping with its merits, yet what plants bloom with such opulent profusion. I re-

ceived a packet of seed called "Dean's Hybrids," which gave a wonderful show of single and double flowers in various shades of purple, blue, pink, flesh, mauve and white; with intermediate tints I had fourteen or fifteen distinct sorts. I devoted one bed ten by three feet to them, and the effect of such masses of flowers was quite imposing.

Reference to this bed calls up a harrowing experience. Like Mrs. Bonner's, my "sufferings also are miscellaneous," but were I suddenly called upon to point out the most poignant I would unhesitatingly award the palm to cats. Many a morning have I sallied forth to make the usual round of my garden and found it strewn with wrecks. The fence is too high to be scaled by the village dogs, hence it seems to be chosen, especially on moonlight nights, by all the feline acrobats of the neighborhood as a gymnasium, where ground and lofty tumbling, athletic high-jinks, and all the other disreputable antics which depraved and reckless cats are prone to, are indulged in. The general effect of their high carnival and mad revels was sad and depressing to contemplate. The brittle stems of carnations, loaded with promising rotund buds, lay broken on the ground; my

bed of Canterbury-bells a mass of crushed and broken spikes. Serried ranks of choice delphiniums, just ready to burst into bloom, showed many a disheveled gap, while dahlias and chrysanthemums were stripped of hopeful side branches.

Like the writer of the charming story entitled "Raising Chrysanthemums," which was concluded in the September CABINET, many persons are "down" on hens; but in my opinion the most destructive creature in the garden is a cat. When calmly scanned with a practical and philosophic eye the hen question offers a consoling solution; for whenever forbearance ceases to be a virtue, violent hands may be laid upon the hen and its inanimate remains be transmuted into a most succulent and toothsome pot-pie, which is given an added relish from the comforting thought that it was our neighbor's hen and cost us nothing in ready cash, however much it might have cost us in heart-burning. Over-scrupulous persons would no doubt consider this a foul proceeding, but of such we may safely infer that they know nothing of the trials and tribulations which form a part of so many gardening experiences, and consequently their opinion has no value.

F. LANCE.

SOME OF AUTUMN'S SURPRISES.

IT was a mild day in the middle of October. The foliage was extremely varied and beautiful; the air was redolent with the health-giving odors of the pines, oaks and hickories, seeming to arise principally from the freshly-fallen leaves as we pressed them beneath our feet. Here and there the ground was strewn with hickory nuts, sweet white-oak acorns and the larger, bitter red-oak acorns. Occasionally we found a hardy sprig of aster and golden-rod in bloom, notwithstanding we had had severe frosts, and the children, miraculously as it seemed to them, found two or three violets in bloom. Probably the very mild, damp weather had caused the flower-buds, packed away for early spring blossoming, to mistake the season and venture out at this unusual time. The flower stems were very short, as though the little blossoms, awakened so suddenly, had not had time to stretch themselves. Mr. Sylvester Baxter, in a short poem, thus speaks of them:

The long procession of beloved flowers
Has wound its way through spring and summer hours,
And only the witch-hazel's flickering light
Now waits to usher in the winter's night.
All else are gone, save, smiling at my feet,
Some clustered violets look up and greet
My gaze. They speak: "From our fair army's head
Turned back have we with message from the dead,
Or seeming dead. Farewell, and ease thy pain!
They all send word, 'Next year we come again.'"

In a low place in the woods we came upon a large scattering clump of witch-hazel bushes in blossom. This was another great surprise, for we did not expect to find

these flowers so soon, but probably the early frosts had unlocked the buds, and now the long, slender, light-yellow petals must needs joyfully burst forth to meet the warm sun. The witch-hazel delights in all sorts of rollicking tricks, and one of them is to yield delightfully spring-like blossoms after cold weather sets in and other plants have long rested from blooming and have cast off their leaves and snuggled up all their powers in winter quarters; and another trick is to mature its seeds late in the next autumn.

This "find" ended our walk, so full of beauties and surprises, and we filled our arms with branches of the graceful flowers to take home. We gave some to our neighbors, sent some to an invalid friend whom we knew loved such things, and in the evening two ladies called who had never seen in flower this shrub, so renowned in the annals of witchery, so, of course, we gave the remaining branches away, assuring them that the next morning we could in ten minutes gather more. But ten minutes to the witch-hazel glen would allow no loitering by the way.

We spoke of an article in an old number of one of the magazines which we had all read, where the writer tells about the mature seed-vessels bursting with a pistol-like report and scattering the seeds to a great distance. In a few moments, while busily talking, we heard a cracking noise, followed by something small and hard striking against the wall. We knew in a moment that the witch-hazel was at one of its tricks, and the magazine writer's account was verified.

The next morning we brought in two large clusters of

the flower branches, some leafless and others retaining the yellow leaves, and placed them in large vases in opposite corners of the rooms, which were thrown into one by a wide sliding-door. One of the bouquets was placed before a window, and the light as it fell through the dainty yellow blossoms and sere leaves presented a vision of indescribable delicacy and beauty.

When evening came again the very spirit of mischievous fun was manifested by these hazel boughs. One vase of branches seemed to enter into a playful warfare with the other, like two armies of school-boys shooting peas at each other with popguns. The reports followed each other rapidly, and the pretty, shining brown seeds, a little larger than grains of rice and slightly similar in form, flew thick and fast from room to room. Some-

times the children would get hit upon the head; then shouts of laughter would drown the cannonading for a while. They said the fairies were playing ball, and it would not require a great stretch of the imagination to believe that some tricky earth-spirit was enthroned in this delightful bush. This sport was continued far into the night. The children gathered up the seeds to sow in boxes to watch them grow, expecting them to develop in some curious manner different from ordinary seeds.

The pleasure obtained from one little walk cannot be fully estimated, as we have no account of how the hazel transplanted to other homes behaved, and our enjoyment required no particular technical knowledge of plants.

CORA E. PEASE.

AGRICULTURAL EDUCATION.

OUR agricultural colleges are just now targets for much sharp criticism, because the course of instruction is broadened out to embrace subjects which seem to have little relation to the cultivation of crops. Many of the critics, who do most of their farm work in the newspapers, seem to be distressed because the students are likely to gain some thorough mental discipline. They fear that young men who receive substantial intellectual training will abandon the farm. While not asserting it in set terms, the underlying assumption of their argument is that a tiller of the soil ought to know little besides the art of cultivating crops. He should be an expert at wielding the hoe or guiding the plough, but if he knows anything of history, general literature or other subjects which are classified under the general name of the Humanities, he will to that extent be unfitted for agriculture. No one with the ordinary collegiate education takes to farming, they say, or to any other "practical" calling. Liberal education, so-called, draws boys away from the farm, and what is primarily demanded is something that will anchor them there.

Now it is to be observed that few of these critics are themselves making a livelihood on the farm, and could not be induced to embrace the occupation which they are so anxious for the boy to take hold of. Many of them, if presented with a well-stocked farm, would starve to death in a year or so, if they had no other means of support. These newspaper farmers and political farmers are the ones who insist on the dignity of agriculture and characterize it as the most noble of callings, and yet they assert that a liberal education unfits a man for this glorious work. It is also to be noted that none of those critics state in a definite way just what should be taught in agricultural schools. Not one of them, so far as we have seen, has laid down any curriculum, and it might be instructive to examine a course of study evolved by them as the ideal one for an agricultural college.

Certainly this would be no easy task. A thorough farmer should know some chemistry, and yet no farmer

can be enough of a chemist to make an analysis of any soil, fertilizer or farm product unless he should devote himself to the work continually. He should know something of the anatomy and physiology of his stock. He should be able to study with intelligence the destructive and the helpful insects which meet him at every turn. He should be familiar with the general laws of plant growth. He should know something of the rocks from which the soil of his acres has been made. He needs a rudimentary training in many natural sciences, but he cannot be an expert in all or any. What he wants are general principles, and he must trust to others to do the fine work in chemistry, geology, zoology, botany, entomology and the like. In connection with these scientific studies why not give the basis of a broad general culture? If such training makes men of wider sympathies and enables them to wield a wider influence, why deny it to one who is to pass his life on a farm? A merchant or banker with such a mental discipline may not be aided by it directly in the prosecution of his business, but he is a man of more consequence and higher repute, and so would be a farmer.

The details of farm work are to be learned on a farm. Agricultural schools which teach the art of farming as distinct from the science of agriculture, just as industrial schools instruct boys in any mechanical trade, are institutions of different grade. Agricultural colleges should not be called upon to give instruction largely in the mechanical details of farm work. Their expensive equipment can be put to higher use. Men of mark in various fields of science are not needed to do the work of farm laborers. If agricultural colleges turn out graduates who are well grounded in agricultural science, and who, in addition, are men with a grasp of mind which enables them to fill places which give them larger opportunities for usefulness than the farm now affords, they are doing good work.

That the farm does not offer an adequate field for the activities of the enterprising graduates is the fault of agriculture and not of the colleges.—*Philadelphia Press*.

THREE.

THREE people alone in a country house
Under the mighty hills ;
Three people living the quiet life
That daily duty fills ;
Three voices to join in the holy hymns
That hallow the evening air,
Three hearts to whisper their secret wants,
Aside from the household prayer.

A fair young face, like an early flower
With the dew upon it yet ;
A fresh young heart that had nought behind
Which it would fain forget.
Another face, still in youthful bloom,
But stirred with the vague unrest
Which sees a want in the present hour,
And yearns for the future's best.

The third had a shadow across her brow,
But a smile in her earnest eyes,
Like the light on those solemn mountain scenes,
Under the sunset skies,
Which make us think of life's toil and pain,
And patience and wasted love,
But only as notes in the psalm to which
God's angels march on above.

The lassie, she gathered the heather bells
And sang to herself the while,
With some bonnie thought in her girlish heart
That spoke in unconscious smile.
"The dower of my life is nearly won.
And the world is complete for me,
When the house is finished on Sunnybrae,
And Jamie returns from sea."

And the lad he clambered the mighty hills,
And wrestled with wind and rain ;
And dreamed of the heights Fame keeps for those
Who will pay her price of pain.
"I will win to her proudest peak," said he,
And his bold brown hair waved free.
"I will write my name on the page of Time,
And men shall remember me !"

The mother she sat in her wee brown house,
And toiled at her spinning-wheel
Or crooned a psalm as she went about
Attending the household meal.
"My past was happy ! God keeps it still !
Behind Heaven's golden gate,
But praise His name, He gives work to do,
As long as He bids us wait !" —*Selected.*

PATTY HEMPSTEAD'S WEDDING JOCKEY.

THE rows of polished pewter dishes shone on the shelves of the high buffet, the fire blazed in the huge fireplace, the sunshine fell in waves upon the white, sanded floor, and the tall, oak-cased clock in the corner ticked with accustomed regularity, as pretty Patty Hempstead paced to and fro spinning one September morning more than one hundred years ago. The young girls of these days would doubtless scorn the humble household occupation in which Miss Patty was engaged, but none of them could look handsomer or more graceful than she did, her trim, slender figure set off by the white, dimity short gown and the calamanco petticoat, and her long golden curls tossing with every movement of the fairy, springy feet and white arms.

As the great wheel-rim revolved at every stroke of the ashén pin given carelessly by the fair hands, the young spinner kept time by singing in a clear, sweet voice, whose very echo was music, a quaint refrain which seemed to accord with something that was on her mind that morning:

"The mermaid rose from her coral sea-bed ;
And what shall I wear to-day, she said.
Oh, I will wear a dress of sea-green moss,
And my hair I will comb it *à la gros*."

One after another of the soft rolls of wool disappeared, until the spindle was laden with a spherical bunch of

yarn white enough to be used in knitting a pair of stockings for Patty's own slender feet ; then suddenly the whirring and the singing ceased simultaneously, and the girl—she was only eighteen—exclaimed :

"Mother, what *shall* I wear ? Do tell me ; and only think, it's to-morrow night."

Many a woman has asked the same question before and since Patty Hempstead's day, but certainly none ever felt a greater solicitude and anxiety regarding the "where-withal she should be clothed" than Patty did on this particular morning in the fall of 1780. The occasion she referred to was a ball and reception that was to be given the officers of the French fleet at the Assembly Rooms by the citizens of New London. Lafayette, Rochambeau and the rest of that brilliant coterie were expected to be present ; but Patty thought more about a certain young naval officer named Reuben Saltonstall than she did of any of those foreign dignitaries.

He would be there, and Patty was eminently desirous of looking "becoming," so that Lieutenant Saltonstall should not be ashamed of her. Then, too, if she should be asked to dance with Lafayette or Rochambeau, she was sure she did not wish to "look like a dowdy," as she expressed it, for Patty was quite as proud and vain as a young and beautiful woman is apt to be.

The question perplexed her more than you can guess.

It was during the dark days of the Revolution, and money was scarce in the colonies except among a few of the richest families. In this case, however, it was not owing to any lack of means, for Squire Joshua Hempstead was one of the heavy citizens of the seaport town. The trouble was there was nothing to buy.

For days and days they had been expecting at Elnathan Popplewait's wharf a ship from Europe laden with a quantity of shawls, muslins, silks and laces, as well as more material necessities, but they waited in vain, for either unpropitious winds or some of King George's cruisers kept the merchant vessel from her destined port. The ball was now close at hand, and if the Mary Ann should come in that very day it would be too late to manufacture any of its cargo into a ball-room dress.

"Oh, dear, what shall I wear?" cried Patty, tapping her red-heeled shoes upon the floor impatiently. "I am worse off than the mermaid, for she did have a moss gown, and I have none that's fit to wear."

"There's your old India muslin," suggested Mrs. Hempstead. "It might be——"

"Don't speak of it; I wouldn't be seen in that dress again for all the world," said Patty, almost with tears in her eyes. "I would sooner stay away from the ball."

"Do you remember the white satin petticoat made with the long train, that I was married in?" asked Mrs. Hempstead, thoughtfully.

"Why, that is the very thing. Why haven't we thought of it before? The train can be festooned so that it will not embarrass me when dancing and other changes can be made if desired," and Patty's face brightened.

"Now, if you only had a jacket or short gown to wear over it, I don't see why you wouldn't be fixed," observed her mother, as she pulled out a drawer of the big chest and proceeded to unfold the satin petticoat that had not been worn for years and was quite as good as new.

"I have it! I have it!" shouted Patty, springing away with such a whirlwind of a rush as to startle quiet Mrs. Hempstead.

She returned in a short time, carrying in her hands a sky-blue satin waistcoat heavily embroidered with silver thread.

"What in the world are you going to do with that, Patty Hempstead?" exclaimed her mother. "It is your grandsire's waistcoat, child, the very one he wore at the court of George II. when he was presented to Queen Caroline."

"And I, Colonel Hempstead's granddaughter, will wear it at the reception of the Marquis de Lafayette," said the beautiful girl, her face all aglow. "See, it fits as well as though it was made for me. A few snips of the shears will make it all right."

"And it becomes you marvelously well, though I would not say aught to increase your vanity," observed Mrs. Hempstead, as she stood off a short distance and contemplated with motherly pride the strikingly picturesque figure.

"I wish I knew what Polly Shaw is going to wear," said Patty, walking back and forth, and pausing now and then to give a sly peep into the large mirror on the wall.

"She cannot wear her grandfather's waistcoat, whatever else she wears, for he was never at court," answered her mother.

"The mermaid rose from her coral sea-bed ;

And what shall I wear to-day, she said,"

hummed Patty, as she ran upstairs to her own room.

It would be impossible to tell how many times Patty tried on that satin waistcoat, adapting it to the softer outlines of her graceful form, and how little by little her careful snippings transformed the old-time relic into a jaunty "jockey" or jacket that might have graced any lady at the court of His Majesty George III. But you can imagine Miss Patty, when the ball night arrived, dressed in her white satin petticoat and the sky-blue waistcoat, her hair drawn high over a cushion and allowed to fall in ringlets behind, where it was confined by a string of pearls (also an heirloom), a bunch of asters at one side, long kid gloves on her hands and a band of black velvet round her white throat.

As she stood waiting in the hall for her father's coach, a box addressed to her was left at the door. Patty opened it with eager fingers, for she recognized the handwriting, and after unfolding wrap after wrap of tissue paper, finally came to an elegant gilt and ivory fan, its edges ornamented with swans'-down and the face embellished with pink and yellow shepherds and shepherdesses.

"Oh, what a beauty!" exclaimed Patty, "and how thoughtful Reuben was!"

The next moment she heard her father calling her name.

That stately assembly has passed into history, and we have not the time to reproduce in detail the glories of that evening, how grandly the building and grounds were illuminated, how carriages rolled and grated on the gravel walks and negro servants in white kid gloves handed out ladies in velvet and satin, and how the two distinguished men, Lafayette and Rochambeau, both toasted the bright eyes of Miss Patty in the spiral-stemmed champagne glasses of the time.

"*Grande ciel!*" exclaimed the gallant Rochambeau, "where has such a beauty been kept all this time? It's a sin and a shame to hide such a light under a bushel."

"It has not been hid, as my young friend, Lieutenant Saltonstall, can testify," observed Lafayette, as he turned with a smile to a noble-looking young officer who wore the uniform of the navy.

"*Pardieu! mais mademoiselle est adorable.* She will beat all the grand dames at court. I did not suppose I should see so beautiful a woman in America. There must be blood somewhere," said Rochambeau.

"It is young blood, count. Youth is always fair."

"Not like that, marquis," returned the count, "not like that."

It was all like a dream of enchantment to Patty, and she was more than satisfied. She did not have a single rival, not even Polly Shaw, and when she danced a minuet with Lafayette everybody asked who that beautiful girl was.

"How lovely you are to-night, Patty!" whispered the lieutenant, as he led her away from the marquis, her cheeks still flushed from the compliments of the gallant

Frenchman. "And where did you get that elegant dress?"

Patty tapped his lips with her fan. "Ungallant, you should never ask a woman how she dresses. The prince never asked Cinderella."

"True, but he might never have lost her if he had, and been to all the trouble of hunting for the mate of the silver slipper."

"Well, I will tell you, but not to-night," she whispered.

And Patty did tell him not long after, and when he had heard the story her lover answered: "Well, you never

looked so handsome in your life as in that dress, and your grandfather's waistcoat shall be your wedding short gown. It is my wish."

So it happened that Patty Hempstead wore her grandfather's waistcoat on her bridal day, and there are those living to-day who remember hearing old people say that she was the most beautiful bride they ever saw. Her husband took her with him to Europe shortly after their marriage, and her grace and beauty won her many flattering compliments alike at the court of Louis XVI. and that of George III.

F. M. COLBY.

CARNATIONS.

"AIN'T them posies purty?" inquired the driver, as he reined in the ponies, giving us an opportunity to see and smell real carnations that bloomed so bravely in the new unsettled Western prairie, in spite of hot winds and lack of rain.

Carnations, a whole bed of them, the first we had seen for months; a homesick soul surely lived in that tiny box-cabin, minus all comforts and denied the luxury of shade.

"Oh, how lovely and so fragrant," exclaimed Marcia, climbing out of the lumbering wagon, and, going straight up to the beauties, she bent over them, inhaling their spicy fragrance delightedly.

"You likes de pinks, laty," and a stout German woman came down the walk, with scissors in hand and a smile of welcome lighting up the homely features.

"Like them, I love them, for a twofold reason, because of their beauty and because they remind me of home. Are you going to sell me a cluster?" and Marcia held out a silver coin, which was gently refused.

"I am going to geef you some of dem pinks. De fraulein speaks right, dey are lofely an' dey be gute for de heartache; old Gretchen find dem so. All my life I worship de lofely blooms, given us by de gute God, an' de carnation be de flower my betrothed love best in de Faderland.

"Many happy hours we spend in our little yard tending de pinks. When he leafe me desolate ant cross de ocean to be head gardener for a rich man in dis land, he pluck a crimson carnation, an' say:

"By de time dey bloom again I hope to hafe mein own Gretchen in a home over dere. Don't weep, fraulein, surely de flowers bloom in 'Meriky as well as in de Faderland.'

"He left me lonely. I wait one, two, three, even five year, an' he be too poor to get a home yet; den I get togeder my property, which was so little, an' cross de ocean to find my liebe.

"Ach! mein heart sink when I see de change in him. De ruddy cheeks were pale; mein liebe was marked for death.

"I get married to him, an' work day an' night to make his last days easy.

"Efery time I go to market I do without somedings, to get a clove pink for de poor, weak, thin hand to hold. Somedimes I get a dark red, den a canary, rose-color or pink; he lofe de pure white ones, too.

"Somebody tell us of a chance to get land in de West by comin' to live on it. I manage to get mein husban' here an' wid mein own han's make dis hoose, but, virst of all, I digs de sod to plant de pinks.

"We see hard times, so far away from eferybody, an' we hafe so leetle money to buy friends.

"I worked to get things warm before winter, Wilhelm cough so much.

"De carnations grow lofely; before de frost come I cover dem wid dry prairie grass. Joost before de snows I spread old carpet over de whole bed.

"De winter's winds an' blizzards were severe; many dimes I get frozen an' hafe mooch trouble to keep de cold from my sick hoosban, but he life thro it all, an' de spring days bring him new hope.

"But, laty, he only life to see de pinks in bloom. Oh, so bootiful dey were de mornin' he opened his eyes upon de glory of de shinin' angels an' better home. In his dear hand he held tight a pure white carnation.

"I was alone, and could not think the messenger had come for mein liebe.

"Ach! it is not for Gretchen to sadden sweet young souls like you, dear young laty. Wilhelm is happy. He sleeps just over the way, and Gretchen never ceases to be thankful dat she coom to dis new land in time to make bright his last days.

"I calls de pinks Wilhelm's flower, an' his grave is de place where dey love to bloom. Here is de nosegay."

And Marcia held out her hand for the blossoms, unable to speak for tears of sympathy.

"A safe an' gute journey to you, laties," and Gretchen grasped our hands warmly, and we drove off regretfully, looking back at the kindly, faithful woman living so bravely her solitary life, away on the lonely prairie, far from home and kindred.

ELLA GUERNSEY.

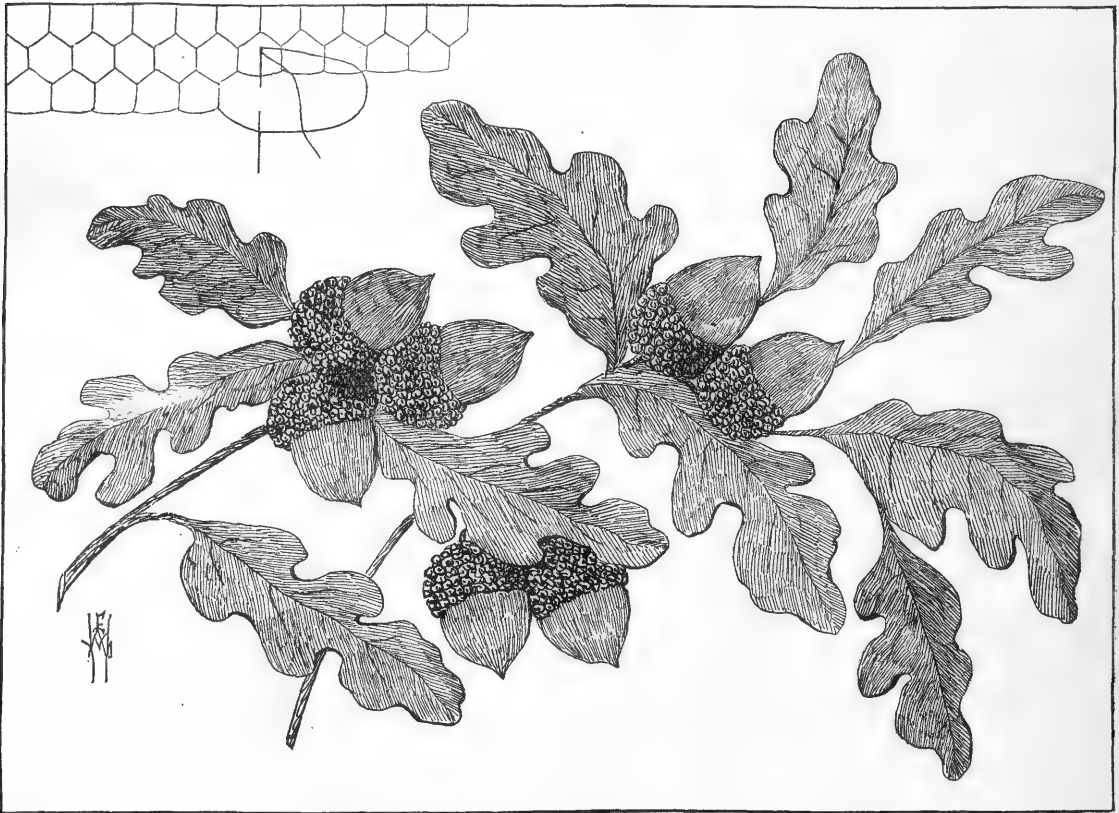
HOME DECORATIONS.

Table-Scarf, with Honey-Comb Stitch and Applique Border.

INSTEAD of using the ordinary method of darning for filling the groundwork of appliqué, or outline embroidery, the honey-comb stitch is found more desirable because of its novelty and is equally as simple and pretty, as it forms a network over the material on which the design is embroidered.

It is worked in button-hole stitch, leaving a space of a

acorns of brown velvet, and the stems and acorn cups embroidered with embroidery silk, using knot-stitch for the cups. Natural oak leaves of various sizes will furnish the pattern. After they are cut from the velvet arrange them on the satin band as shown in the design, or in whatever way seems most appropriate to the width and length of the band used. Baste them carefully on the satin to keep them perfectly smooth until fastened by button-holing the edges, and this should be done with sewing-silk the color of the velvet. The leaves should be veined with Japanese gold thread, which does not tarnish



DESIGN FOR AN APPLIQUÉ BORDER.

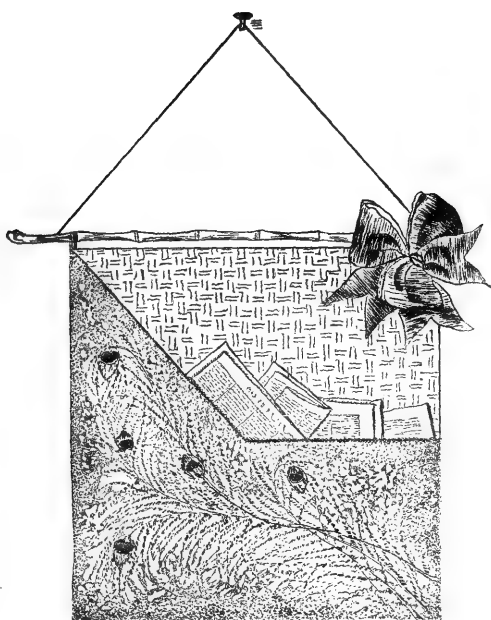
quarter of an inch between each stitch of the first row; the stitches of the following row are worked half way between, as shown in our illustration, and the honey-comb appearance is given by looping the needle under the stitch of the row that has just been finished, and drawing it down slightly when taking the stitch for the row that is to be worked, thus making a network.

An appliqué design of acorns and oak leaves cut from velvet is pretty on gold-colored satin and filled in with honey-comb stitch, using a deeper shade of gold embroidery silk, or else that of golden brown. The oak leaves should be of deep leaf-green velvet, the

by exposure to the air and light, and comes in skeins of fifteen yards at fifteen cents a skein.

Such an appliqué band forms a beautiful decoration for the ends of an olive-green felt table-scarf, which should be lined with gold-colored sateen and the band placed about three inches from the end of the scarf so the felt will show below as well as above it. The ends are finished with tassels made of chenille and gilt filigree work; they are about three inches deep and the combination of metal and chenille gives them a very rich and antique appearance. Chenille tassels with tinsel pendants are also very handsome for such uses.

M. E. WHITEMORE.



WALL-POCKET FOR PAPERS.

Wall-Pocket for Papers.

A PRETTY paper-holder is made of a piece of matting, such as comes around tea-boxes, with a pocket of cardinal plush arranged on it.

Fold the edges of the matting over a piece of pasteboard measuring twelve by fourteen inches, and baste it to the pasteboard with just enough long stitches to hold it until the lining is fastened on the back.

Cut a piece of cardinal cambric the size of the pasteboard, and turn the edges down half an inch on all the sides. Sew this fold to keep it in position and then glue the lining to the back of the holder.

Cover the portion of the matting which will not be covered by the pocket with what is known as "flittering," a process which consists in first giving a coat of shellac and immediately sprinkling gilt powder over this. A bright and sparkling effect similar to that seen on picture-frames is thus produced. The powder must be sprinkled as soon as the shellac is applied or, as it dries very quickly, the small particles of gilt will not adhere.

A Japanese reed splasher will furnish material to cover the holder if the matting cannot easily be obtained, and this is prettily decorated in a similar manner with fire-red powder.

Cut a strip of cardinal plush the shape of the pocket shown in our illustration, line it with cambric, finish the upper edge with a silk cord and sew the sides and lower edge firmly and neatly to the matting. Fasten a small brass ring on each upper corner, and through these rings slip a bamboo rod sixteen inches long. Suspend the holder by a silk cord, and fasten a full bow of cardinal satin ribbon on one corner. The peacock feathers which decorate the pocket are painted in natural colors, but embroidered designs are also appropriate and pretty.

S. A. WRAY.

Lamp-Screen.

A LAMP-SCREEN is not only an ornament, but also an article of real use and comfort. The brass standards with banner-rod, similar to the one shown in the accompanying illustration, can be obtained for from 35 to 50 cents, according to size and finish. The base is of polished brass and the ornament at the top is of the natural color of the cat-tails.

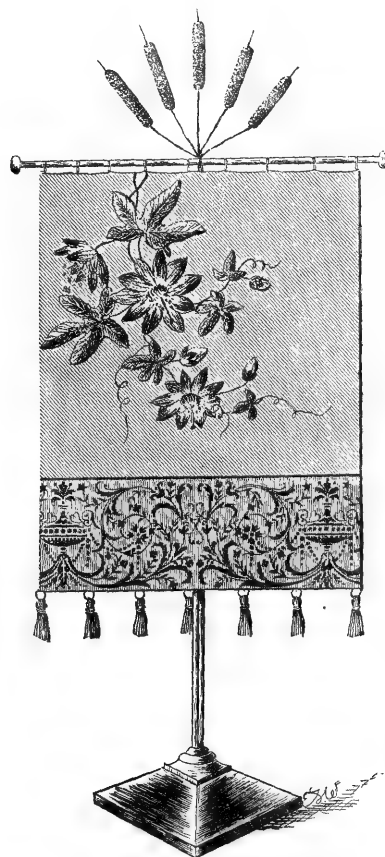
The screen is very prettily made of lavender satin, with a spray of passion-vine embroidered on it in the natural colors. A band of fancy ribbon is sewed across the bottom and the figures in it outlined with gold thread. Small gilt rings with silk tassels tied in them are sewed across as a finish to the lower edge.

A design of buttercups and grasses, worked with ribbosene and embroidery silks on green grosgrain, also makes a very pretty screen.

Or the green silk can be covered on one side with bolting-cloth, on which a spray of sweet-peas has been painted. This is a very delicate decoration, the beauty of which is enhanced by the green silk underneath, which serves as a background to the design, and the bolting-cloth gives the whole a very shimmering frost-like appearance.

Line the silk with yellow satin and fasten on the lower edge a row of silk balls with tinsel tops. These ball tassels are very ornamental and cost but four cents apiece.

E. S.



LAMP-SCREEN.

Vase for Grasses.

AMONG the exhibits at the American Institute Fair this season are some very ingenious arrangements of Mexican mosses and lichens. A Quaker bonnet, a miniature well-sweep with its moss-covered bucket, and various other objects are faithfully represented, but the design which presents the most attractions, because of its practical use and real beauty, is a vase for dried grasses. It is an exceedingly pretty thing and could easily be made by any person of moderate ingenuity. The beautiful lichens found upon the rocks all through our country will furnish an abundance of material.

The style of the vase is rather antique or urn-shaped. It is about thirteen inches high, with a straight neck from two and a half to three inches in diameter and four inches deep. There is an abrupt bulge where the neck is joined to the lower part of the vase, the diameter being fully twice as much as that of the neck, say six and one-half inches, and this slopes to the bottom of the vase, the diameter of which is, perhaps, five inches. Square handles project from the top of the vase and are fastened to the bulge. The shape had evidently been made of paste-board and a lining of bright-colored paper used to cover the seams inside. The outside was completely covered with flat lichens so neatly glued that no portion of the paste-board could be seen.

Filled with plumes of the *Eulalia Japonica*, that most beautiful of all grasses for winter bouquets, such a vase would be very ornamental. S.

Tissue Flowers.

FLOWERS made of tissue paper still remain a popular fancy, and specimens of all degrees of beauty are to be seen, as well as some very clumsy productions; but really beautiful and natural-looking flowers can be made if enough care is taken in their construction.

For those who do not know how to make these flowers, which are so useful in holiday decorations, we give the following directions, prepared from C. E. Bentley's instructions for tissue-flower making:

The finest imported tissue paper should be used, and it can be obtained for two cents a sheet in nearly all the delicate colors. Some special colors, such as poppy-red, cost eight cents a sheet. Branched rose leaves are three cents; single leaves one cent each.

The petals, whether to be used separately or as slips, are cut by folding the paper until a number of thicknesses can be cut at once. Most forms are cut from paper folded so as to make eight thicknesses. This can be done by doubling it, making two, doubling that, making four, and doubling that again to make eight; but that is not the best way, as it makes the crease of the last fold four thicknesses and the petals will be uneven. The right way is to take a square piece the proper size, for the intended form, double two corners together to make a diagonal fold and bring both the corners of this fold to the centre to meet the third corner, thus forming a square. Make a diagonal fold in this to correspond with the two folds already in it and you have a triangular-shaped piece

resembling the folds of a fan. Be careful to have the folded edges come even with one another; this is not so important with the cut edges.

The points of the petals toward the centre of the flower are usually of a different tint from the outer end, and to produce this effect the paper must be tinted. The best and simplest method of doing this is to cut the squares of paper and before folding them lay them on the table and, with a small ball or wad of cotton dipped in a dry powdered color, rub round and round in the centre of the squares. A very little of the powder is sufficient, and the tints so obtained are very delicate and blend perfectly into the color of the paper. For darkening the centre of a poppy use a powder of Vandyke brown with a little ivory black; for the outside petals of the pink tea-rose use chrome yellow with a little French chalk, and the same for the inner petals of the full-blown double rose. For the centre of a snowball use chrome green and French chalk. For a yellow rose use chrome yellow with a little carmine. A few trials will teach you how to obtain any desired tint.

In some cases, as the outer edges of the inner petals of the full-blown double pink rose, it is necessary to supplement the tinting with staining, which is done wet. Take the petals just as cut and dip them in water, and while still wet dip the edges into another little saucer containing water in which a little carmine has been dissolved. The carmine will run in a little from the edge here and there, giving the irregular and delicately blended shading of pink and white seen in the natural flower. While wet the petals will look perhaps rather limp and discouraged, but they will dry out all right.

The tea-rose is one of the flowers most successfully imitated in paper. Four forms are used for this and each is to be cut four times, using three or four shades of paper; the darkest for the smallest size, as these form the centre of the rose, and the lightest for the fourth size, which form the outer petals. Before folding the largest square it should be tinted in the centre with chrome yellow and chalk if you are making a pink rose.

The paper for the smallest petals or first form should be three inches square and the three sizes following should each be one-half inch larger. Cut each folded square in a deep scallop, leaving uncut only about three-quarters of an inch from the point. Open those of the largest size and cut all the way down to the centre, as these outside petals must be used separately.

To form the rose, first make a centre by twisting a small ball of cotton into the end of a piece of covered stem wire, and cover it with paper to match the darkest slips or scallops, gumming it a little to make it hold firmly. Now string the first set of slips on the wire stem, then the second, then the third; then, holding in the left hand the ball forming the centre, run the first slip up close to the ball and proceed to turn the separate petals up over the ball one after another, each succeeding petal lapping a little over the preceding one, and each held in place by the forefinger of the left hand. When all the petals of this slip are brought up as described, slip up another and repeat until they are all brought up closely around the centre. Slightly gum the edges of the last

row of petals about half way up where they lap to make them keep their position.

Next curl the edges of the outer rows of petals by holding a knife so that the blade presses against your thumb, and then drawing the paper two or three times between the blade and thumb. The petals will curl over toward the side the knife is on. The blade must not be sharp, as it is to rub the paper and not to cut it. With a pair of tweezers open out the inner petals that were folded up over the ball, beginning at the outside and proceeding toward the centre. Now for the outer rows of petals, which were cut to be used separately. Curl these before putting them on, and crimp the pointed ends a little at each side to make them cup-shaped. Cut a short slit in the point of each petal, to allow it to surround the stem. With a little thick gum attach the petals, three in a row, around the rose, and in the next row allow the petals to come in spaces between those of the first row, and the third row between those of the second row. This is usually enough, but a few more petals may be added if a larger rose is desired. Finish the rose with a calyx and seed-pod, which it is best to purchase already made. The seed-pods are four cents a dozen. Wind a small strip of gummed tissue paper around the stem to hold the seed-pod in place, and continue it down to cover the stem, or use the tubular rubber stem which comes for this purpose. Arrange branched leaves with them.

The petals of a full-blown double rose are cut similar to those used for the rose just described, with the addition of a fifth form, consisting of a set of larger petals, for which the paper is folded in six thicknesses. All the petals should be tinted before folding, and after cutting should be taken apart and stained. Series 1, 2, 3 and 5 are to be goffered. This is done by placing the petals on a cushion of cotton, and the goffering tool, which is a very smooth stick of rounded shape, is pressed firmly down a slight distance from the edge and drawn down

toward the pointed end of the petal, which causes the edges projecting beyond the tool to curl up in a crinkled form. The same process is repeated for the other edge of the petal. Then turn the petals over, and, using the sharp edge of the tool, make a sharp crease down the centre of the petals. This causes a different crinkle.

Take three or four each of Nos. 5, 3, 2 and 1 and make into sets by laying one on top of another, beginning with the largest size, attaching each to the one below by a touch of thick gum at the pointed end of the petal, making a pile or set of twelve to fifteen petals with their goffered edges turned down. Crease the whole set down the centre from the pointed toward the other end, bringing the edges together and securing them with gum, making a fold in the pointed end, running part way from the point toward the centre of the petals.

Now, taking a rose centre, gum five of the sets of petals, as described above, around the centre. Gum, separate petals, No. 5, against the lower part, in the spaces between the sets of petals just gummed on.

Take five petals of No. 4, and having curled the outer ends and crimped the edges a little near the pointed ends, gum them slightly on the edges and paste them together to form a slip by lapping the edge of one petal over the next until the five are pasted together. Make two of these slips and bring them up close against the back of the rose and finish with calyx and seed-pod.

A full-blown double rose is a difficult flower to describe and may require considerable practice to make it successfully.

Buds and half-opened flowers are made much in the same way, except that the outer petals are left off and the ends of the calyx brought up more. A little study of the natural flower will be of great assistance.

Poppies, snowballs, carnations and chrysanthemums can all be very faithfully copied with the tissue flowers, and the work when fully understood is very fascinating.

HOUSEKEEPING.

To Corn Beef.

Put thirteen pounds of common salt in a can and fill it almost full of water, add three pints of molasses and one-fourth of a pound of saltpetre that has been dissolved on the stove. Stir them together and when cold pour them over the beef. The smoked beef can be put in with it to pickle.

Cabbage Dressing.

The yolk of one egg, two teaspoonfuls of oil, one of mustard, a little salt and three tablespoonfuls of vinegar. Beat the yolk well, then add half the vinegar, the mustard, salt and a little white pepper. Put over the fire and stir till it thickens, then beat smooth and add the rest of the vinegar and the oil. Butter will answer in the place of oil, but it is not quite as good, as it congeals when cold.

Grandmother's Pickles.

To each hundred cucumbers use one pint of salt, and pour on boiling water sufficient to cover the whole. Cover

them tightly to prevent the steam from escaping, and let them stand for twenty-four hours. They should then be taken out and wiped perfectly dry, being careful not to break the skin, and placed in the jar in which they are to be kept. Boil the spices with the vinegar and pour it over them. Keep them tightly covered, and in two weeks they will be ready for use.

Graham Muffins.

One pint of graham flour, two tablespoonfuls of melted lard, two heaping teaspoonfuls of baking-powder, water or milk to make a batter just thin enough to run, a little salt. Bake fifteen minutes in gem pans in a hot oven.

Trifles.

Three well-beaten eggs, a saltspoon of salt, flour enough for a stiff paste. Roll out and cut into very thin cakes and fry in hot lard. Spread half of them with jelly or jam and cut three round holes in the other half and use them for the upper crusts or covers.

Mary's Macaroons.

One cup of hickory-nut meats, one cup of sugar, three tablespoonfuls of flour, whites of two eggs, and a little lemon extract. Drop on white paper, and bake in a slow oven.

Cottage Pudding.

One cup of sugar, one egg, one cup of sweet milk, three tablespoonfuls of melted butter, one tablespoonful of baking-powder, two and a half cups of flour. Bake about forty minutes. Eat with a sauce while warm.

Poor Man's Cake.

Two cups of light bread dough, one cup of sugar, three-fourths of a cup of butter, three eggs and one teaspoonful of cinnamon, one cup of seeded raisins, a little grated nutmeg, one teaspoonful of soda dissolved in two tablespoonfuls of tepid water. Beat it well and let it rise. When light, bake in a slow oven.

Ladies' Cake.

Three cups of powdered sugar, one large cup of butter, one cup of sweet milk, four cups of flour, one teaspoonful of cream of tartar, one-half a teaspoonful of soda and the whites of eight eggs. Stir the butter to a

cream, add the sugar gradually and stir well; then put in the milk. Sift the cream of tartar and soda with the flour three times and stir it in a little at a time, reserving the whites of the eggs for the last, unless the batter seems too thick to stir easily; in that case part of the eggs can be put in in alternation with the rest of the flour, but the greater part should be reserved for the last. The whites should be beaten very stiff and added to the cake after the most of the stirring has been given it. Flavor with bitter almond and bake one hour.

Silver Cake.

One-half cup of butter, two cups powdered sugar, three cups of flour, one cup of cold water, whites of four eggs, one scant teaspoonful of soda and two heaping ones of cream of tartar or three rounded teaspoonfuls of baking-powder.

Gold Cake.

One-third of a cup of butter, two cups of powdered sugar, one cup of cold water, three cups of flour, yolks of four eggs with one whole egg well beaten. Same amount of soda and cream of tartar as directed for the silver cake.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

New Dahlias.—At the recent exhibition of flowers at the American Institute there was a creditable display of dahlias from Messrs. Hallock & Thorpe, and two fine seedlings, never before exhibited, from the bulb and seed farm of C. L. Allen & Co., Jamesport, N. Y. The first, Helen, is a great acquisition, it being a seedling from Guiding Star. It partakes of the character of the parent, so far as the shape of petal and color goes. But the flower is larger, a very pure white, possessing great depth of petal, beautifully cupped and high in the centre. The flowers are borne on long foot-stalks, a desirable feature and a useful one, if the flowers are wanted for vases. It received the society's medal of excellence. Linnæus, the other new seedling, is one of the best in the long list of desirable varieties. The plant is of medium height and strong. The flowers are clear pink, large and entirely free from coarseness. The centre is most admirable, being completely filled, compact, symmetrical and well elevated, giving the flower a perfect outline. It is a most profuse bloomer, and the flowers are on foot-stalks of sufficient length to give them prominence over the plant; in fact, from the abundance of bloom the foliage is scarcely noticed. This plant has not had other than ordinary field culture. When well managed it cannot but make a grand display.

Speaking of dahlias leads us to remark their tendency to sport, which we have noticed this season more than in any previous one, whether owing to climatic or other conditions we are unable to say, and it is sufficient for the present to state the facts. The most noticeable of the plants so peculiarly affected is John Thorpe; its beautiful rosy-lilac flowers have, in some instances, come one-half white, in others a pure white centre with rosy margin, making it singularly beautiful. The idea of John Thorpe

sporting seems perfectly ridiculous; we supposed of all flowers this would prove constant, hence the selection of name; but that it should show the white feather baffles our understanding. We have no longer any confidence in names.

* * *

Capital is the name of a new pea that is on the road to distinction, and bids fair to be well up in the list of good varieties for the vegetable garden. It is a sport from Little Gem; in habit it is midway between that old favorite and American Wonder. It is some days earlier than Little Gem, more prolific, and is a good filler. The pea is large, blue, nearly smooth, and from what we know of it we think that market gardeners will find it a desirable acquisition. It originated on Long Island, where it is being thoroughly tested. It will not be put in the market for one or two years yet.

* * *

Silverleaved Sunflower.—In this we have one of the most showy annuals in cultivation. It is a floral paradox, having been known for years, yet never known at all. It has had its place in botany for many years, but not until now has it been honored with a place in the garden, and a more desirable or conspicuous object is rarely met. Its peculiar character consists in its silvery foliage, which makes it a beautiful object before blooming, and its wonderful profusion of flowers continues from July until killed by severe freezing. No ordinary frost affects it in the least. We have lately seen a bed of it, 550 feet long and 25 in width, which presents a mass of unbroken, deep, clear yellow flowers, with jet-black centres. The mass is fully ten feet high in the centre, the branches gracefully bending to the earth on the sides, A sectional view would be a perfect semicircle. The

flowers are much smaller than those of the Oscar Wilde, with deeper color. The first flowers are terminal on the main stalk when about two feet high. Before these are gone lateral branches from every leaf are put forth, with terminal flowers, and from the axle of every leaf other branches are put out, which operation is kept up the entire season. A single plant, well grown, will form a perfect pyramid ten feet high, with a base of eight feet and as completely covered with bloom as a zinnia.

* * *

The Phacelia is a genus of very curious plants, producing their flowers in one-sided fascicles, which unroll themselves slowly. The flowers are rather pretty in themselves, but are half-hidden by their bracts or coarse-growing leaves. The genus includes annuals, biennials and perennials. The former are natives of California, and bear blue flowers; the two latter are natives of South America, and have pink flowers. These are but little cultivated.

P. campanulata.—Blue campanula primrose, the subject of our illustration (see page 273), is a Californian species and is highly esteemed away from home. It is spoken of as follows in the *Gardener's Magazine*:

"Although not a campanula, and only half a primrose, the name we have given this pretty plant will really convey a fair idea of its character. The phacelias are allied to the borageworts, and more nearly to the primworts, their place being in the somewhat vague order of Hydrophyls. *Phacelia campanulata* is one of the many good things obtained for our gardens by Mr. Thompson, of Ipswich. It is native of Southern California, and equal in value to any of the whitlavias and eutocas. It is an annual plant, of neat growth, six to ten inches high, with bell-shaped flowers of a brilliant blue color. Sir J. D. Hooker speaks of it as 'rivaling the most admired gentians.'"

* * *

Lace-Flowers.—While taking a walk a few days since with a young lady from Kansas, she suddenly exclaimed, "See the lace-flowers! do they grow wild here?" and commenced cutting wild-carrot flowers with a zeal that would have greatly pleased the farmer on whose land they grew. Upon inquiry I found they are a florist's flower in Kansas and quite a rarity, the flowers selling as high as roses.

* * *

Chrysanthemums.—The chrysanthemum boom is heard again, and louder than ever before. John Henderson, Esq., of Flushing, N. Y., was the earliest in market with cut-flowers, sending his first on October 12. We need not say they brought high prices, for they always do when they cannot be easily obtained, and the prospect is fair for good prices the whole season. Already a fashionable wedding is completely spoiled because chrysanthemums to match tan-colored gloves cannot or could not be had the third week in October. Every florist in New York was called upon to furnish the bride's bouquet of tan-colored chrysanthemums and it could not be done; consequently there was mildew on the wedding. We should advise those who must have a flower of a particu-

lar color for a particular occasion to consult John Thorpe's chrysanthemum diary in order to have the time suit the flower, as the flower will not always suit the time.

* * *

Cosmos bipinnata.—This new annual surpasses any plant we know for late flowering in the garden. Besides forming a dense mass of white, and various shades of purple flowers, it is furnished with the most delicate foliage and will stand without injury as much, or more, frost than the chrysanthemum. As for delicacy and grace it has no equal in the garden in autumn. Its great value is for cut-flowers; the pure white and lovely purple harmonize perfectly. Another feature of interest is the length of time the flowers last. Before us is a large vase filled with the blossoms, which have been cut for nearly a week, and they seem as fresh as when first brought in. If this plant can be induced to adapt its habit of growth to our seasons, and come into flower a little earlier, as many tropical and sub-tropical plants do, its value could not be overestimated. As a companion to the chrysanthemum it is fitting, its grace and delicacy harmonizing so beautifully with the strength and vigor of the latter.

* * *

Orange-Flowered Tuberoses.—What are they? This is a question which comes to us very often, and well may it be asked when the meaning is so obscure. Names of flowers and plants are supposed to be representative, to indicate color, form, history or usefulness; certainly they are not or should not be deceptive. We were asked a few days since by one of the leading seedsmen of this country if we had grown the bulbs, and if the flowers were really a good orange, referring to the color. When we told him it was simply the common single-flowered tuberoses he was astonished, thought we were hoaxing him; but upon being assured of the fact he said: "What a fraud." Another wanted to know if the fragrance was like that of the orange blossom. We had to assure him the only analogy between the two was the power of the fragrance. We expect next to have someone ask if this tuberoses really bears oranges. So much for a name, simply given to stimulate the demand for a bulb with fame outworn. Why not call it what it is, a single tuberoses, the original, and sell it on its merits? And let us say here and now that for almost all purposes it is far more useful than the double form; it flowers more freely, is earlier, and could we have but one it would be this one.

* * *

"The Philadelphia Weekly Press" is fortunate in having an editor for its agricultural department whose love for the beautiful is combined with rare discrimination. His selection of notes as well as his own views on horticultural matters are admirable. We quote the following:

"The wonderful growth of commercial floriculture in this country means more than the development of a great industry. Somebody buys all these flowers or they would not be grown. It means hundreds of thousands of homes made more attractive. It means beauty and fragrance and tidiness in place of disorder and ugliness. It means the cultivation of the finer part of our nature, and that

life in many a cottage is made less sordid and slavish and barren by the refreshing presence of these most lovely of nature's manifestations."

* * *

Hydrangea paniculata grandiflora is, no doubt, the most gorgeous of autumn shrubs and a valuable acquisition, no matter whether we take it as a garden plant or for house decoration. In order to have the largest-sized panicles we should cut back the plants hard, thin out the few shoots that come up, and grow in rich, moist land. Besides this showy form we have the typical plant in bloom. It blooms a little later, is far less showy, has only a few sterile blossoms and is more fragrant than the grandiflora variety.

* * *

Tender Bulbs and Tubers.—It is an old saying that many florists kill their plants with kindness, and at no season of the year is this more liable to be the case than during autumn, when vegetation wants rest, but the amateur thinks it necessary to accelerate growth at all times. Bulbs now need more or less attention, as they are the storehouses wherein the embryo plant is packed away. All so-called tender bulbs must be thoroughly dried as soon after lifting as possible. If any moisture is allowed to remain the central bud will start, and thus weaken the bulb. In the case of tuberoses this is of vital importance, but when once dry they may be thrown loosely in a box and preserved over winter without any covering; but a dry, warm atmosphere is a necessity. Some bulbs, as the tigradias, after drying, require to be embedded in chaff or dry sand to prevent contact with the air, otherwise they wither and lose their vitality.

Tubers are closely related to bulbs and require a similar attention during winter. The former appear to possess a greater vitality than the latter, as a rule, and start into growth with the slightest provocation. The least humidity in the atmosphere during winter will cause dahlia roots to sprout, and a weakened plant the following summer will result. Some growers appear to think that the larger the cluster of tubers is, the finer will be the plant. This is a great mistake, as a single sprout or even a rooted cutting will make a more satisfactory specimen.

* * *

As a Winter Protection for half-hardy plants nothing is better than long strawy manure for covering the ground around them, but care must be taken not to overdo the work by using too heavy a coat. For shrubs and vines it is better always to place very little covering around the top than to use a mass of material which will probably smother the life out of them. It is a good idea to always bear in mind that protection, or rather shelter, is for the purpose of guarding against sudden changes in the temperature, and not, as some people suppose, to preserve the plants warm.

* * *

In Lifting Our House-Plants in autumn, heat must be avoided. All plant life needs a period of rest, and this is the proper time for it. After potting, place the plants in a cool, shaded spot, and water freely. They should be allowed to remain there until severe weather,

when they may be removed in-doors, but even then the atmosphere ought to be cool and moist. To introduce plants into a strong heat from a cool room is ruinous; the change must be gradual. Never force vegetation suddenly, or it will rebel against such treatment. The great enemies of plants grown in living-rooms are red-spider and green-fly, the presence of which is chiefly owing to the dry heat. Sponging the foliage frequently will destroy the former, and syringing with tobacco-water will rid the plants of the latter. It is a good plan to pot strong roots of *Dicentra spectabilis*, astilbe, japonica, lily of the valley, &c., which force readily during the winter. Nice, compact young shrubs, if treated in the same way, will prove very ornamental during winter. They force readily, and are easily managed.

* * *

The Time to Prune.—Although it is not absolutely necessary to trim trees and vines at any one season, we can always perform the work intelligently when the foliage is off, and for this reason autumn may be selected. There can be little question as to the propriety of pruning grape-vines in autumn, as the "weeping" sap will not flow at this season, and a good work is thus performed and out of the way when other duties are urgent.

* * *

Fragrant Roses.—From one of our foreign exchanges we take the following, and indorse it most heartily: "It is a pity that in the great improvement of the rose which has been effected of late years the importance of fragrance has been lost sight of. Form and color have been looked to, but would not development have gone on in respect to fragrance as well, if it had been aimed at? Fragrance has not been a consideration at exhibitions; it has not been a 'point.' The result, has been that it has become a neglected quality, which is exactly what might have been foreseen. In the catalogues of some of the largest firms in the country, fragrance, it will be found, is hardly mentioned. Sometimes, when a rose is described which is pre-eminent for scent, that important quality is not referred to by so much as one word. True, we do not resemble Eastern nations in their fondness for sweet perfumes—our climate interferes; we have colds in the head till the sense of smell becomes impaired. Nevertheless, it may be affirmed that, in regard to all flowers, fragrance is more appreciated by the general public than any other quality. What the lover of sweet flowers may hope for is that the time may come when scentless roses will be disqualified at rose shows, and that in catalogues it may be plainly stated which are the flowers that are only faintly or not at all scented. Inexperienced persons sometimes suffer a great disappointment by finding that they have inadvertently chosen roses which, to them, are only a beautiful fraud. It is not too much to say that, however beautiful a scentless rose may be, it can be matched in beauty by one having the additional charm of fragrance. What is the 'right of existence' of the imperfect flowers? It is true they are not numerous, but the faintly-scented are very numerous, and they are not much better than scentless ones. If all the good qualities of the queen of flowers are guarded and improved, she need, indeed, never fear a rival."

At the Provincial Exhibition recently held in St. Boniface, Man., twelve prizes in the department of plants and flowers were awarded to Mrs. John Cape, wife of the secretary of the Manitoba Floral Association.

* * *

A Chrysanthemum Show and Floral Exhibition will be given in Topeka, Kan., on November 9 to 13, inclusive, by the Bristol Sisters, who are well known as successful florists, of that city.

* * *

Natural Gas used in Greenhouses.—Pittsburgh florists, both amateur and professional, have discovered that natural gas will be of great benefit to them, as by its use the heat in greenhouses and in rooms where plants are kept can be maintained steadily at any degree desired, without the trouble of watching fires.

It has been found that plants thrive well in houses where gas is used as fuel, and those which were weak and sickly when kept in an atmosphere heated by coal become strong and healthy in natural gas heat. The dust arising from coal fires is also deleterious to vegetation to a certain extent, and at the same time greatly mars the appearance of the plants. One young amateur florist is arranging a dial to be placed behind the valve of the natural gas supply-pipe in his greenhouse, so that he can turn on just the amount of fuel he wants to keep the temperature at any degree desired. This idea is a good one, and will no doubt be adopted by others. Some of the florists in

speaking of this matter said that the only drawback was the possibility of the sudden cessation of the supply from accident during the intensely cold weather, but that precautions could be taken that would reduce this to a minimum.

Catalogues, &c., Received.

Lilies, Hyacinths, Tulips, Crocus and winter blooming plants. John R. & A. Murdoch, 508 Smithfield street, Pittsburgh, Pa.

All Garden Supplies. Robert J. Halliday, Baltimore, Md. Wholesale circular for the trade only, and descriptive illustrated retail catalogue.

Hyacinths, Lilies, Tulips and all other Bulbs for fall planting. Michel Plant and Seed Company, St. Louis, Mo. Illustrated and descriptive catalogue. Free to all applicants.

Autumn Catalogue of Bulbs for Garden and Indoor Culture. Wm. C. Beckert, Allegheny, Pa.

Proceedings of the Portage County (Ohio) Horticultural Society for 1885. A society that can furnish material for so valuable a report should be encouraged. The paper by the Rev. J. G. Powell on the origin of soils is both instructive and interesting; it would not be saying too much to call it fascinating.

Small Fruit Plants and Fruit Trees. Wholesale price-list of the Pleasant Valley Nurseries. John S. Collins, Moorestown, N. J.

ANSWERS TO CORRESPONDENTS.

Plant to Name.—*Millie Peters, Dayton, Ind.*—The plant sent is *Gesnera discolor*, a native of South America. You seem to have been very successful in its management.

Ferns.—*Miss A. A. Brown, Columbia, S. C.*—The situation you name will do admirably well for ferns. If there is any plant that delights in shade it is this, in fact, that is all the fern is particular about; give it shade and it will thrive. As for the "English daisies" that grow in your woods we don't know what to say, as we have not the slightest idea what the plant is or, rather, what its habits are. You may depend upon the shade being congenial to it, if it grows in the woods.

Coleus.—*Same*—You cannot give the coleus too much sun in summer, providing it has plenty of water. As a window plant it is not a success. Young plants from cuttings taken in September will do moderately well in the window during winter, but the time and place for the coleus is the open border in summer. Give them plenty of water and cut well back as soon as they commence to show flower.

Begonia.—*Same*—We cannot advise about your begonias unless you tell us to what section they belong. *B. rubra* is a splendid plant for the window, keeping in flower nearly all the winter; it should have plenty of heat

and rather a sunny situation. The tuberous-rooted section contains magnificent flowering plants, succeeding well in a shady border, but will not stand a drought; they must have moisture. They do well as house plants, keeping in flower until about the first of January, then they require rest, which should be given by gradually drying off and leaving in the pot until time for starting in to growth again, say May 1; then repot in fresh soil, using one that is light, fibrous and rich. "Henderson's Hand-Book of Plants" will give you the information you desire.

Lapageria.—*Amateur*—Do not try to cultivate this plant, notwithstanding the temptation is so great. We can imagine your feelings when you see a fine specimen on exhibition; but go where the plant was grown, see the conditions requisite for its growth, and then you will content yourself with plants you now grow so well, instead of speculating with those that are sure to fail. Remember that the most ordinary subject you may select, when well grown, is far more beautiful than the most valued plant poorly grown.

Tulips.—*A. Y., Nevada*—The Duc Von Thol in variety are decidedly the best for the window garden. The bulbs should be potted as soon as possible, putting six in a six-inch pot, use good, rich loam, and set the pots in a cold frame until the middle of December, then bring in and give them a sunny situation.

NEWSPAPER WAIFS.

—Moves in the best society—a fan.—*Hartford Times.*

—A trial balance—The baby's first run.—*Hartford Times.*

—Perhaps you never knew that cornstalk. They can't ear, though.

—An Austin boy described heathen as "folks wot don't fight over religion."—*Texas Siftings.*

—"Of all okepatons in life I take me pick," said the Irishman, as he stepped down into the ditch.—*Burlington Free Press.*

—School-teacher—"What do we call those scientific men who have adopted the germ theory?" Master Kirby—"I know; Germans."—*Tid-Bits.*

—The Lynn Item and John G. Whittier are all wrong on the leaf-coloring question. The leaves color when the time comes, frost or no frost. And too heavy a frost spoils their color. The coloring is a perfectly autumnatic process.—*Lowell Courier.*

THE MYSTERY OF HUMAN MECHANISM.

How often do physicians find upon a second visit that the medicines they had left, or the prescription they had ordered, had either failed to effect the desired change or produced an unlooked-for result. Over and over again the most skillful and learned in the medical profession are made to pause and ponder at the obstinate resistance of the malady to yield to the proffered remedy, or at the surprising and almost opposite effect to what was desired or expected; thus proving that the human system is no mere machine, to be taken apart, cleaned, repaired, readjusted, and restored to complete running order. To the educated and well-developed mind this fact needs no demonstration. Yet it is surprising how many, when they send for a doctor, do so with the idea that if they tell him "I feel all out of sorts," "I think my liver is out of order," "I have a pain in my heart," "I feel as if I would suffocate," or, "I have a misery in my back," "Now, doctor, won't you give me some medicine to cure me and make me well again?" As well might the owner of a factory go to some machinist, or send for him to come to his counting-room, and there tell him, "Sir, there seems something wrong with the machinery," or, "The engines don't work right," or, "There seems something wrong with the boiler; won't you send up something that will make it all right again, or, will you tell me what to send for and what to do, and then my mill can go right on?" What would be the machinist's reply? "Why, you fool, I can't tell you what to do till I see what is the matter. It may be a loose pulley in the machinery. It may be a broken bolt or broken key in the piston-rod. It may be the fault of the pump, or one of a thousand other things; and I must examine: I must see what is the matter before I can tell what should be necessary to be done." If the doctor could act the part of a machinist—could take out the heart as he would take off the force-pump, unscrew the cylinder, take out the piston, open and examine the valves, wipe out all the chambers, put in new screws, renew the packing, oil the journals, redress the valves, then, when he put it together again he could say with confidence as he would go away, "There, when you start that pump or heart again, it will work all right." Smart indeed, and justly famous, would be the jeweler who could take up a useless watch, look on its face, feel its dead stillness, or listen with its close to his ear to the wondrous tick of its escapement, and without opening it, and without using his eye-glass to peer into its movements, say off-hand and at once, "Your watch has a worn pinion, or has dust among the cogs and in the ratchet-wheel. All that is wanted is a little cleaning out, and it will run all right."

Why is it that so much more is expected of a physician to heal the parts of human mechanism, that he has never seen, and cannot see until after the death of the patient, than of a machinist, who has fashioned the engine?

And how ready are we to grumble at our doctor if

we do not get well and become restored to health as rapidly as we desire. Is he not the true physician—then, who says, "I cannot look into your body, and discern clearly the exact condition of each affected organ. Such and such organs appear to be affected. I will endeavor to assist nature, by giving it an extra supply of the needed material elements to take the place of the diseased atoms and expel them." Such is the effect of true, pure, and simple revitalizing agents. They do not and will not aggravate the body, but their essential attribute is to render aid to all efforts of nature to eliminate discordant elements, and never to retard nature's work. Such is the Compound Oxygen Treatment.

Thirty-seven thousand patients that have been using the Compound Oxygen Treatment in the last seven years fully establish the fact that it in nowise increases disease or injures the human economy. A well-prepared digest of the history and working of this remarkable revitalizer, in the form of a two-hundred page brochure, will be sent free by addressing Drs. Starkey and Palen, No. 1529 Arch Street, Philadelphia, Pa. They have also a large variety of monographs on different chronic diseases, which are sent free on application.

"We bear testimony, with many others, that your house is the promptest paying advertising agency in the Union," writes a publisher in New York to Geo. P. Rowell & Co., 10 Spruce Street, New York city. This careful attention to the rights of others largely assists Rowell & Co. in securing the best service for their customers.

Mothers
DON'T neglect the
1st symptoms of a
Cold but use
Perry Davis'
Pain Killer
and prevent serious
consequences.
Delay is
Dangerous
Pain Killer Cures
Coughs, Colds,
Sore Throat,
Diphtheria,
Frost Bite and
Neuralgia.
Buy a bottle NOW
All druggists sell it

PROF. DOREMUS ON TOILET SOAPS:

"You have demonstrated that a perfectly pure soap may be made. I, therefore, cordially commend to ladies and to the community in general the employment of your pure 'La Belle' toilet soap over any adulterated article."



Is made from the choicest quality of stock, and contains a LARGE PERCENTAGE of GLYCERINE; therefore it is specially adapted for Toilet, Bath and Infants.

NEWSPAPER WAIFS.

—A Rousing Speech—"Get up, breakfast is ready!"—*Burlington Free Press.*

—Judging from the tightness of the article, it isn't every girl who can laugh in her sleeve nowadays.—*Rochester Post-Express.*

An Awful Doom

of any nature is usually avoided by those who have foresight. Those who read this who have foresight will lose no time in writing to Hallett & Co., Portland, Maine, to learn about work which they can do at a profit of from \$5 to \$25 and upward per day and live at home, wherever they are located. Some have earned over \$50 in a day. All is new. Capital not required. You are started free. Both sexes. All ages. Particulars free. A great reward awaits every worker.

—An exchange says, "Cranberries are looking nicely." Potatoes may look nicely, brother, for potatoes have eyes. But cranberries look nice, not "nicely."

—The Universal Cooking Crock Company, of New York city, on August 14 received the following despatch from the managing agent for Delaware and Maryland at Washington: "Express one full set, nickel, for the White House." Signed, S. C. Gregory.

MUSICAL.

[From the Boston Home Journal.]

The frequent appearance of the Knabe Pianos in our concert-rooms is not at all surprising to those acquainted with the history of the firm, or the character of the instrument itself. Not long since, the writer, when in a neighboring city, had occasion to play upon one of these pianos. It had withstood the test of twenty-five years' service. The greatest pleasure was still to be derived from its tone. It was so resonant and musical that it seemed as if—like old wine—it must have improved with age. In no other way than this could we justly illustrate its perfect state of preservation. The Knabe Piano of to-day is in the foremost rank of instruments. As one listens to its ringing vibrations it appears as though the poetry of tone itself were being revealed in a language far more complimentary and just than any verbal praise could possibly be.



LADIES' FLORAL CABINET.

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AS GREATEST HONORS LATE IN LIFE
LIFE'S WINTER MAKE LESS DREAR,
THE WREATH OF CHRISTMAS HOLLY CROWNS
THE OLD AGE OF THE YEAR

CHRYSANTHEMUMS FROM SEED.

THOSE who would most fully enjoy and appreciate the chrysanthemum must grow it; and in order to grow it successfully a knowledge of its history and habits is necessary to accomplish easily what has generally been considered a task of great magnitude.

There seems to have been a veil of mystery overhanging chrysanthemum culture, which had to be lifted before anything like success could be attained, but the fact is there is nothing easier in floriculture than to secure the very finest varieties from seed, and that, too, in as short a period of time as the plants can be grown from cuttings.

For our Japanese varieties we are indebted to Robert Fortune, the celebrated English collector of rare plants, who visited Japan as soon as it was opened to English visitors, and who has probably collected more really useful plants than any or all others who have visited Japan for this purpose. His were the first English eyes to look upon the chrysanthemum, and he said some of the plants were marvelous to look upon. He made the best collection of plants that could be obtained, but the consignment perished in the transit. He was fortunate, however, in collecting some seed, and was delighted to find, that, when the seed grew and the plants bloomed, he had regained all that he had lost. This fact proved to him most conclusively that cross-breeding is not required to produce variation among these curious forms of the chrysanthemum, as each variety seems to possess the capacity to produce varying forms. And in what class of flowers do we find such remarkable variations, not only in form but in color!

Mr. Fortune's experience and delight in growing the chrysanthemum from seed was no greater than that of some of our amateur and professional florists. Those who attended the recent chrysanthemum exhibition, held under the auspices of the New York Horticultural Society, could have seen results equally satisfactory. There were fine plants from seed sown early last spring, and these were not mere accidents that come singly and at long intervals; they were in such profusion as to suggest a shower from the floral kingdom. And from whence did they come? From the professional florist, who has been riding the chrysanthemum hobby for years, one who is in a chrysalis state all the year except in November, the only month in which his whole being truly scintillates? Not so; they were from a private garden, where flowers are grown because they are loved. The seeds were sown by "Agricola" and the plants watered by "Artemesia" during the great drought of autumn, which was to plant life a famine, and the increase delighted and astonished the lovers of this, the noblest of all autumn flowers.

But for the benefit of the many who think the growing of the chrysanthemum requires all the skill of the astute florist, and is attended with difficulties on every hand and uncertainties innumerable, let us be more explicit and

say the most remarkable exhibit of chrysanthemums that we have ever seen was made by E. M. Allen, Esq., of Ridgewood, N. J., at the last exhibition. Mr. Allen grows flowers as most people read novels, simply for amusement, a rest from active business pursuits, and his success has been most wonderful, yet no greater than anyone can attain, with but moderate care and attention, in the common kitchen garden. In fact, one good recommendation the chrysanthemum has is its easy culture and the certainty of getting some new and desirable form or color from seedlings. Mr. Allen showed some forty varieties, a few of which were of extraordinary merit, and all of which would do credit to any professional gardener. His Chalice, pure white, cup-shaped, as its name would imply; Mrs. Akers Allen, a pure white and delicate canary centre, and Grace Allen, a fine yellow, were certainly as beautiful flowers as the most devoted admirer could wish. And to beauty of form, perfection of color, Mr. Allen has added fragrance. The old artemesia odor, which was anything but agreeable, has taken its departure, and in its stead, in the variety named Mrs. Akers Allen, we have an odor closely resembling that of the violet. From whence it came we are at a loss to understand, unless perchance the name brought it.

In the exhibit of "New Seedlings" made by Richard Brett, Esq., of Short Hills, N. J., we have another happy illustration of the pleasure that evolves from growing chrysanthemums from seed. This collection was entered in competition for the Pitcher cup, and won the prize, although, in our judgment, the Allen collection should have had it. But then tastes differ, and we freely admit that ours was not generally shared. That, however, has nothing to do with the fact that chrysanthemums, as good as the best, can be grown from seed, and that quite easily, the only difficulty being the procuring of good seed, which should not be a hard task in this country, as it ripens freely in our greenhouses, where the plants can be grown with but little, if any, artificial heat.

Seed may be sown at any time from January 1 to March 1 in ordinary seed pans, pots or boxes, either in the greenhouse or window garden. It will speedily germinate, and when the young plants show two pairs of leaves they should be pricked out singly into small pots, and then grown precisely the same as if grown from cuttings. It is best to cut off all weak shoots that come up around the main stem, and only grow such as are strong and vigorous. When the time comes for putting out bedding-plants, give them good airy positions in the open border. They are not particular as to soil, preferring a lively loam, moderately rich. Like all other vegetable forms, the better care they have, the better will be the results. It is a mistake to suppose that flowers six inches in diameter can be had on half-starved, neglected plants. While the chrysanthemum will most generously reward good treatment, it will as quickly resent neglect; and to

secure good flowers, that is, such as are known as specimen flowers, the plants must be liberally fed, judiciously pruned, carefully potted, so as not to injure the roots in lifting, be kept away from frosts or cold draughts, and to a certain extent disbudded. To get those enormous flowers that so astonish visitors at an exhibition but a single flower is allowed on a stem. This is quality at the expense of quantity, if size alone represents quality, which we do not admit. The opinions formed at chrysanthemum shows are erroneous and deceptive, as the visitor expects the same results from the dozen plants he orders, and to which he gives but little care or attention, as the florist has obtained with all knowledge, skill and appliances. But this is foreign to the subject under consideration.

We most earnestly advise the growing of this popular flower from seed. The certainty of getting a good collection and the possibility of getting some of superior merit are so great that a peculiar charm is added to the work. In addition to all this there is an indescribable fascination in the production of what are popularly known as novelties, some new form or color, or the combination of both, that makes the subject worthy of a distinctive variety name, and that name any you choose to select.

We take great pride in naming our own, in giving a flower the name of one that is dearer to us than all others; or to compliment a friend by associating his or her name with one of the purest and most beautiful objects on earth—a flower.

But can we grow such flowers as are on exhibition without artificial heat and other appliances? We answer, no; that is, not in such perfection as we have just seen them. We can, however, succeed well with some very simple structure. For instance, have your plants in a bed so arranged that you can erect over them a temporary frame on which you can place a few hot-bed sashes, or you can protect against frost by frames covered with oiled paper with very satisfactory results. There are a number of varieties that flower sufficiently early so as not to require protection; but one of the main objects in growing chrysanthemums is to prolong the season of flowers, and what little a suitable protection will cost should not be considered an obstacle in the way of their growth. Again, as window plants there are none better, and your seedlings can be as well tested there as in any other position. At least they will grow as well there as those reared by the professional florist. But one word more, in buying seed get the best that you can obtain.

ROSE GOSSIP, &c.

THE advent of about seventy new roses for the present season is announced by the French growers alone, and this respectable number, together with the new English and a few new German roses, will form a long and expensive list, too costly to be met by the meagre possibilities of an average amateur's purse when the fact is kept in view that the regulation price of novelties is \$5 each. This has become a fixed rule, to be broken only on extraordinary occasions when some superlatively worthless variety is foisted on a confiding public at \$10 a plant.

What captivating descriptions these enthusiastic Frenchmen give of their roselings! They have reduced this matter to a fine art. That which to our dull sense seems simply to be a lovely dark-crimson rose, is, in the fervid fancy of the producer, embellished with endless glowing colors and with delicate shadings *ad libitum*. No changing hue, however transient, escapes the keen vision of the ardent rosarian, and no matter how elusive or evanescent a tint may be, if for one brief instant it has passed like a subtle, tremulous flash athwart the radiant face of the cherished fair one, its fleeting presence is faithfully and lovingly recorded. The most intricate combinations of shades are detected and described with all the copious prolixity and minute precision which are born of passionate love, aided and abetted by a fertile imagination. The actual merits of roses thus described do not always accord with the elaborate portrayal, while the shifting and evolutionary beauties of others can scarcely be exaggerated. But, after all, what wonder that he should clearly see perfections not apparent to a cold and calculating eye? His beloved rose is perhaps

the sole candidate found worthy of selection in a batch of 30,000 seedlings, the only flower with sufficient merit to entitle it to enter the rose list, and by bringing fame and lucre reward him for all the patient care and loving labor lavished on such a numerous and, with this sole exception, abortive progeny.

But this is a digression. To go back to five-dollar roses, I may incidentally remark that many of us impecunious amateurs, filled with a yearning desire to possess roses so temptingly and attractively described, should be doomed to sigh in vain, did not the professional florist valorously come to the rescue. At this important stage of our experience, the utility and most beneficent influence of florists become conspicuously apparent, for no matter how gay, festive, or even rollicking, he may be when attending the annual convention, yet, when matters come down to a question of trade, the florist at once subsides into the cool, alert and cautious man of business, ready and willing to meet the needs of a rose-loving constituency, by paying, with lavish enterprise, any price ranging from five to five thousand dollars for a promising or desirable sort. The honor of such a daring venture as the payment of the latter sum for a single variety, an event unique in the historic annals of the rose, reverts to an American florist, and the most pleasing phase of the incident was that the perilous venture proved a brilliant success. Immediately on receiving the new roses the florist turns his attention to the proper means of rapid propagation, and at the end of six months or thereabouts is prepared to offer eager customers the five-dollar roses at reasonable rates, prices usually varying from twenty-five to fifty cents. Thus, through the convenient medium of

this enterprising class, we are exempted from waiting several years for diminished prices as the glamor of novelty passes away, and are enabled to acquire, at a moderate cost, new roses, which at the original price would be beyond the reach of many of us.

For this and various other conservative reasons I refuse in the most positive manner to enter into the somewhat radical views of a multitude of my amateur friends, who, because they have had the misfortune to fall into the toils of a few unscrupulous florists who mendaciously make a specialty of sending out roses under false names, vindictively express a hope to live to see the day when the paternal and benevolent Indian policy of the Federal Government shall be vigorously applied to florists, and the vacancies thereby created filled with intelligent amateurs. But the finer instincts of our common humanity forbid a measure so extreme and dangerous—one that would inevitably lead to complete floral anarchy. It cannot be denied that the amateurs are, numerically speaking, the stronger faction, and their cause may be just, but there are potent pleas for mercy and magnanimity, the innocent should not suffer for the guilty. For, in the event of an indiscriminate massacre, what would be the fate of those just men, the major portion of the craft, those good, whole-souled fellows, who always put in lots of extras, nice little baskets, and when parcels are light occasionally pay express charges? It would manifestly be unjust to exterminate them for crimes of which they were spotlessly innocent; hence, I would here suggest an equitable middle course. Let a law be enacted which would confer the necessary powers on the Federal Government to confiscate the establishments of all florists found guilty of the heinous crime of substitution, and the proceeds of the sales thereof be devoted to the cost of founding and properly equipping a national rose college, where technical instruction might be given and the future budding young florists of the Republic be thoroughly grounded in the correct nomenclature of the queen of flowers. Truly this would fill a long-felt want. What disposition to make of the guilty florists should now engage our serious attention.

I am aware that a powerful current of public opinion favors instant decapitation, but while respecting this opinion I am forced to protest that I cannot share it. As a consistent and life-long opponent of capital punishment I cannot conscientiously approve of the summary execution of these misguided men, miscreants though I know them to be, and, however much such a sanguinary proceeding might be in accordance with strict justice, I deplore, as all Americans worthy that noble name should deplore, the introduction of a barbarous custom, copied from the judicial procedure of a benighted land like Japan, and the permanent appointment of an official Lord High Executioner would be an anomaly and a lasting disgrace in a free republic. No, let wiser counsels prevail. Still, on the other hand, it would be the highest imprudence to liberate these desperate men, for in that case they might ultimately degenerate into tramps, and thus menace society in a still more dangerous form than when plying their former guilty avocations. From the foregoing grave considerations it may be seen that the subject is actually bristling with difficulties, and the

only feasible solution to such a knotty question, and one that would inflict a desirable measure of ignominy, and at the same time obviate the necessity of shedding blood, would be this: Let Congress grant additional powers, to condemn them to perpetual banishment to Alaska, which course would also prove to be an admirable way in which to utilize an otherwise useless dependency of the American Union.

I wish it to be distinctly understood that the foregoing views are advanced with extreme diffidence, though I cannot deny, nor do I seek to conceal the fact (on the contrary, I frankly admit it), that these suggestions are of the highest importance and are redolent of the purest patriotism, for all must, of necessity, acknowledge that the legal and peaceful adjustment of a burning question is infinitely preferable to a lawless uprising to gain the same end.

I probably should not have had courage to express my views in this definite and luminous manner, and I might have from constitutional apathy or cowardice culpably withheld them, had not E. L. Taplin, in a recent and very interesting paper on nomenclature, alluded to me in a manner so pointed that it left no plea for further reticence on my part, and I hasten at once to respond to this well-timed appeal to a chivalric nature. Therefore, for the revelation of whatever may be found valuable and seriously practical in the method I advance for the extinction of an intolerable abuse, the thanks of grateful amateurs should be given to the writer I have named, who, in the course of the paper above referred to, modestly disclaimed possessing ability to grapple with an evil apparently so deeply rooted, yet, nevertheless, presented an idea so pertinent that, were it universally adopted by florists, the evil would at once cease to exist. It was this: "Let each American florist take proper means to render himself individually and morally certain that his plants are correctly named."

However preposterous it may seem at a first glance, still I feel constrained to assert, in spite of the apparent absurdity, that there are other writers qualified to treat this subject with an ability equal to that displayed by myself, or, to still further emphasize the assertion, by E. L. Taplin, and it is to be regretted that they hesitate to enter the arena. Thus far three valiant knights alone have borne the brunt of the battle for correct nomenclature. Mrs. E. Bonner, for instance, wields a facile pen, and after one solitary but brilliant passage of arms has abandoned the field where she, with such honor, broke a lance in our noble cause, but now, alas! seems to ignore the prompting significance of that ancient and proud device, "Noblesse oblige," which for ages has been the main source of countless deeds of daring. Perhaps she feels hampered by that dual position she so cleverly defined, and needlessly fears that what love might prompt her to do as an amateur would conflict with that which duty demanded of her as a florist. This is a fallacy. The harmonious union of the two conditions is as compatible as an alliance of "pleasure and profit." It is only the *bad* florist who cannot at the same time be a *good* amateur. I am told that Maple Grove roses are always true to name, and this is the only infallible mark of a good florist. She is an amateur from instinct and a florist

from accident, or, rather, simply a vice-florist, for, of course, the "bosom of the family" is the head of the household.

I started out to describe a few of the promising new roses of 1886, and find that I have already exceeded my limits. I cannot, however, resist recommending to all amateurs who may have an opportunity to procure Clara Cochet, a hybrid remontant of last year, which in the CABINET of January last I ventured to predict would achieve success. This rose is highly praised in France and England.

I hope that my appeal for support will strike a responsive chord in the hearts of other writers, and I trust it will not be considered presumptuous on my part to recommend the policy and salient points of this article.

In order to render permanent and efficient service to the "Nomenclature Reform Movement" it shall be our ambition to attract serious and thoughtful minds, and by the justice of our cause and the cogency of our reasoning to convince erring florists that the same variety of rose decked out in a score of Protean disguises is simply "a mockery, a delusion and a snare." F. LANCE.

AN ENGLISH WATERING-PLACE—THE HOME OF THE VIOLET.

IN the West of England, one hundred and twenty miles from London. The train will take us there in a few hours. We are at Clevedon, on the Bristol Channel, or, as Whyte Melville writes, on the Severn Sea. Has Clevedon ever been visited by Americans? Yes. Elihu Burritt has been to Clevedon and so has Henry Wadsworth Longfellow, for the charming sylvan watering-place is dear to the poet, inasmuch as Coleridge resided at Clevedon, and his cottage may be seen there to-day, that cottage of which he sang:

Low was our pretty cot ; our tallest rose
Peeped at the chamber window. We could hear
At silent noon and eve and early morn
The sea's faint murmur. In the open air
Our myrtles blossomed, and across the porch
Thick jasmine twined. The little landscape round
Was green and woody and refreshed the eye.
It was a spot which you might aptly call
The Valley of Seclusion.

The remains of Henry Hallam, England's greatest historian, and of his son, Arthur, lie in the chancel of the quaint old parish church. Tennyson penned the beautiful "In Memoriam" to the memory of his loved friend:

The Danube to the Severn gave
The darken'd heart that beat no more.
They laid him by the pleasant shore,
And in the hearing of the wave.

There twice a day the Severn fills ;
The salt sea-water passes by,
And hushes half the babbling Wye,
And makes a silence in the hills.

* * * * *

I climb the hill : from end to end
Of all the landscape underneath,
I find no place that does not breathe
Some gracious memory of my friend.

Roses bloom in Clevedon all the year through, and the orange and the myrtle thrive in the open air. Great trees of Maréchal Neil and Gloire de Dijon cover the cottage homes, and are entwined about the handsome villas. The air is fragrant with the perfume of many flowers, but chief among them all is the violet—the lowly, humble violet, but not lowly or humble here. Oh! no. The violet, the Victoria Regina, for which Clevedon is famed, is

a magnificent floral tribute, a regal beauty, in size nearly as large as a half-dollar, with a stem fully six inches in length. There are acres of this plant grown in and around Clevedon. An old friend of ours brought it to perfection, and there is a history attached to it.

George Lee, a Fellow of the Royal Horticultural Society, was broken in health and fortune; he had been a hard worker, and was to all intents and purposes a good man. One morning when walking through his garden he noticed a violet in bloom—it was very large, very fragrant, and beautiful beyond conception; the species was not Russian, it was distinct. He carefully tended the plant, preserved the seed, and from it he brought out the magnificent flower now known in Europe as the Victoria Regina. His fortune was made, and he always said that God sent him that flower in answer to prayer. George Lee has letters of acknowledgment from the Queen of England, the ex-Empress Eugenie, the Emperors of Russia, Germany, Austria, and from many well-known statesmen and men of letters.

The home of the violet is on a hillside, a glorious hill; the Vale of Somersetshire, one of the most picturesque vales in England, is spread out before it. The hill is clothed with evergreens, laurel, holly and fir. In winter-time the sighing wind sends a requiem through the trees; spring and summer cover hill and vale with greenery, color and life; autumn brings many tinted beauties, but the violet is always there, and the air is ever filled with its perfume. The plants are grown in thick ridges a foot in height. Every year new plantations are laid down, and the young plants are wet with paraffine largely diluted with water; this is a grand fertilizer. The flowers are gathered and packed in tin boxes, and sent by rail and mail to all parts of Great Britain, Ireland and France. In the large centres of England the Victoria Regina is much sought after. The merchant princes of Liverpool, Manchester and London appear on 'Change with a "button-hole" of violets, and the correct thing in English society is a bouquet of violets. There is no doubt that many an American beauty who will read this simple sketch has worn on her bosom a floral tribute from Clevedon and has never known it, and never known that the flowers she wore were the means of saving a good man from ruin and perhaps disgrace.

GEORGE JAMES CAPEL.

NEW ROSES RAISED IN LYONS.

AS it may interest your readers I send you, as in former years, a list of the new roses raised in Lyons and which are to be sent out November 1. I will describe them as I saw them last month. They are thus really *remontant*, not "perpetual," as some are erroneously called with you. But custom makes tyrannical rules. September has been very abnormal here; very hot until the 19th, then suddenly relatively cold. On the 15th we had 32° Cent. (89.6° Fahr.), and on the 23d only 15° (59° Fahr.). So it was in August 33° (91.4° Fahr.) on the 10th, and 15° (59° Fahr.) on the 18th. What is the matter? In America earthquakes and floods, in Spain the same, and cholera besides. Here the mildew on vines has done much mischief, and the remedy used has, it is told, poisoned some people. The remedy used here is called Bouillie Bordelaise, and consists of a mixture of chalk and sulphate of copper. The latter is reported as poisonous when the dose is too great.

TEA-ROSES.

Vivand Morel (Bernaix).—Large, dark cherry red, slightly yellowish, centre lighter. New shade.

Madame Scipion Cochet (Bernaix).—Large flowers, solitary, in buds yellowish pink, when expanded fleshy rose, centre yellowish. Very free bloomer.

Docteur Grill (Bonnaire).—Medium size, fine clusters, vivid yellow, centre light orange, shaded light rose.

Duchesse de Bragance (Dubreuil).—Full, good shape, size of Persian yellow, fine sulphur yellow. Free bloomer; fine.

Baronne de Fonveille (Gonod).—Medium size, light rose, slightly yellowish. Fine in bud; vigorous.

Luciole (Guillot).—Large, full, fine shape, vivid rose, tinted yellowish. Free bloomer.

Mademoiselle Elizabeth de Grammont (Levet).—Large, full, fine shape, vivid rose, centre yellowish. Free bloomer.

Madame Honoré Lefresne (Levet).—Large, fine shape, full, dark yellow. Free bloomer.

Attraction (Dubreuil).—Medium size, full, petals slightly crinkled, vivid rose, darker centre, plants dwarf. A hybrid tea.

Madame Joseph Desbois (Guillot).—Large, full, fine shape, rosy white, centre yellowish, free bloomer. A hybrid tea.

HYBRID PERPETUAL.

Stéphanie Charreton (Gonod).—Large, full, fine shape, centre vivid rose, edged lighter and whitish.

Louis Rollet (Gonod).—Large, fine shape, like Baronne de Rothschild, dark cherry red. Free bloomer.

Madame Desir (Pernet).—Medium size, globular shape, like Centifolia, full, solitary, dark, vivid rose, richly fragrant.

Orgueil de Lyon (Besson).—Medium size, nearly full, fine shape, dark purplish crimson, shaded lighter. Free bloomer.

Docteur Antonin Joly (Besson).—Large, solitary, fine globular shape, very bright rose, slightly shaded yellowish. Vigorous.

Madame Bois (Levet).—Large, fine shape, delicate rose. Vigorous and free bloomer.

BOURBON.

Madame Chevallier (Pernet).—Medium size, nearly full, very large panicles, fine buds, dark lilac rose. Abundant bloomer.

JEAN SISLEY, in *Gardeners' Magazine*.

MONPLAISIR, Lyons, France.

SOME DESIRABLE PLANTS.

I AM usually a little cautious about recommending to amateurs the many new aspirants for favor that are catalogued every season by florists and seedsmen, until I have first given them a thorough trial, for I have learned by experience that "all is not gold that glitters;" that an elaborate description may cover a very commonplace plant, and a royal title be given to flowers of low degree.

Testing new plants sometimes proves a costly experiment, and occasionally brings us nothing in return for the expenditure, except it be vexation of spirit, a state of feeling not at all enviable, or elevating to the human race in general, nor to certain individuals in particular. However, it would be very surprising indeed if florists did not sometimes trade upon the weakness of people for new and rare plants and enrich themselves at their expense.

That plants of every genus or species should prove just as good and true as they are represented by those who

introduce them would be too much to expect of erring human nature; so, when we are about to purchase new varieties from the list of rare and beautiful gems, while we would not question the honesty of the florist, let us take the advice of the poet and "allow for the crawl." It may not save us anything in dollars and cents, but our emotions will not be so liable to become *complicated*.

Two of the most satisfactory plants that I tested last season were the *Platycodon grandiflora* and *Cosmos bipinnatus*. The former is a hardy plant from Japan, and belongs to the campanula family, which one may readily perceive by the form of the flowers. *Platycodon* is a Greek word meaning broad bell-flower, which tells us the shape of the blossoms.

The plant grows about three feet high, and produces its pure white flowers quite liberally during the summer months. It has a tuberous root, is perfectly hardy, and

will live and bloom, it is said, many years, increasing in size and beauty each year. If seeds are sown early in the spring they will bloom the following autumn and make fine plants for another year. I believe I may safely say whoever invests in the platycodon will get an equivalent for his money.

The *Cosmos bipinnatus* is a charming new Mexican annual, introduced last year by John Lewis Childs. This plant has been called, by those who can speak advisedly, "one of the very finest of all out-door flowers." But let me tell its merits as they are catalogued: "This plant is a large, rank grower, the foliage of which is perfectly elegant, and for fall blooming it has no superior. Seeds sown in April or May and transplanted in the open ground will produce plants five or six feet high by September, and from then till November will be covered with hundreds of blossoms three inches across. Planted in pots and brought inside to flower, like chrysanthemums, they are grand. The colors are of various shades, from pure white to purplish crimson. Both foliage and flowers are unsurpassed for bouquets and vases." As far as I have had experience with this annual, it sustains its reputation well.

For the benefit of those who have had but little experience I will mention a few more of the good things for an outside garden. Where stately plants are wanted for the centre of beds or for grouping I know of nothing finer than *Hyacinthus candicans*. I have found it a most accommodating plant, thriving well and making a beautiful display even in ordinary situations. The blossom-stem shoots up about four feet high and produces a profusion of pure white bell-shaped flowers, which keep perfect a long time. It has appropriately been called a "grand and magnificent" plant. This is a bulbous plant, perfectly hardy and easily grown from seed.

I have raised double dahlias from seed a great many times, but never tried the single varieties until last season, and I presume I should not have done so then if a kind florist had not sent me a packet of seed; for ever since they were first introduced, until my plants had produced their large, velvety, star-shaped flowers, I had associated them with those worthless things that frequently crop out from seeds of double ones, and I wanted none of them. But I was both surprised and pleased to find them really beautiful and of such a diversity of color.

My seeds were sown in April and transplanted to the garden the last of May; they grew rapidly and came into bloom sooner than my dahlias from bulbs. And in justice to the gentleman who sent the seeds, and to the flowers themselves, I do not hesitate to say that I consider them worthy of a place in any garden, and that whoever can succeed with an aster can successfully grow the single dahlia.

The *Nicotiana affinis* is another reliable white flower for the garden. It is a robust grower and blooms most profusely throughout the season, being one of the last to go down beneath the touch of the Frost King. These beautiful silvery stars open out toward evening and light up the garden wonderfully, making the air redolent with their delightful perfume, and close again when the sun gets well up in the morning. They are very desirable for

cutting for vases, as the flowers keep fresh several days and the buds unfold as well as if attached to the parent stem. I find this plant one of the best for house culture; if given a strong light and no sun the flowers remain open all day, and if young plants are potted in autumn they bloom well in winter.

As the *nicotiana* has been mentioned in a previous number of the CABINET in rather unfavorable terms, perhaps some reader may wonder how the experience of two individuals can differ so materially with the same plant. I believe I can explain it, and in doing so prove that, while both of us are right, one of us has the wrong plant. My first two trials with the seeds of *Nicotiana affinis* proved very unsatisfactory; the flowers were small and a dirty white, while the odor was hardly perceptible; it had so little to recommend it that I dropped it from my list without one sigh of regret for the loss.

The summer following a friend called me into his garden to see if I could name a plant that bore large white stars, and there for the first time I beheld the real *N. affinis*, or a flower that answered to the description of it. Of course, I was delighted with it, as I am convinced every lover of the beautiful must be when the genuine flower is seen. The only fault that I can find with this flower is that you cannot persuade it to remain open when the sun is shining; but it has so many good points we can readily forgive this one failing. The *Convolvulus major* has many warm friends, and yet it is without fragrance and opens its bells but a short time in the morning, while the *Nicotiana affinis* fills the air with sweetness and is an evening glory as well as a morning glory. One season I sowed a packet of the variety above, or a packet bearing the name above, and another packet of *N. suaveolens*. I couldn't perceive a particle of difference in the flowers, both kinds were nearer gray than white and were odorless. Evidently these seeds are put up and labeled in good faith, but, like petunias, they do not always come true from seed. In the true variety both tube and flower are white. It is worth more than one trial.

And to those who have never tried it I want to recommend the new fern-leaved parsley. It is as beautiful as any fern and will thrive where ferns will not. I used it last season for mixing with other ornamental plants of low growth and for bordering beds; the effect was charming. I also potted a few roots for the house; they are doing finely and are much admired. The extra curled dwarf is also pretty for bordering beds. This variety has a moss-like appearance; the leaves are beautifully crimped and curled; it is indeed an interesting plant and the flower-garden seems its most fitting place.

As the seeds are slow to start into growth, if we want plants to set out as soon as our beds are prepared, sow them in seed boxes and give gentle heat; when they begin to break through the soil place in a sunny window and as soon as they are strong enough transplant into richer soil and harden them gradually to the out-door air until they can be left out altogether. The parsley is perfectly hardy by nature, but sometimes a hardy plant may be injured in its infancy by a sudden change from a hot room to the cold outside air.

MRS. G. W. FLANDERS.

THE QUEEN OF AUTUMN.

THE autumn fields are flowerless and forlorn, save for a shivering sneezewort here and there. But with the death of other flowers comes the veritable queen of autumn, the many-hued chrysanthemum. She tosses her elfin locks in the sighing breeze, and holds up her bright face as cheerily to November's sky as if she smiled at a summer sun. I like the courage of the chrysanthemum; it has a sort of Pilgrim-Father character highly to be commended, though its advent affects the florist's trade much as watered stock affects a railroad.

Since, as the "Little Tycoon" says, everything Japanese must be correct, small wonder that the national flower of that ingenious country is in high favor. Really, we are as much indebted to China as to Japan for varieties of this flower, but we are apt to lose sight of this fact, probably through our habit of regarding a laundry-check as the most noticeable national emblem of the former land. The Chinese flower is usually admired for its regularity of form, while the Japanese is a mass of wild fluffiness, as if it defied all restraint and was bent upon life, liberty and the pursuit of happiness after its own particular fashion.

Cosmopolitan Hall gave a good opportunity to study the tricks and manners of this flower during the late show given by the New York Horticultural Society. Although the exhibition was under the disadvantage of being rather earlier than usual, while the season was much later, the chrysanthemum growers made a brave showing, and the public interest in the affair was manifested by the large attendance. The first arrangement of the hall was not very good, being too mixed in color, but after the judging this was altered and made much more effective. The cut blooms were better specimens than the plants, owing to the flowers on the latter not being sufficiently advanced. The general arrangement of the hall was defined by banks of evergreens; these shut off the space beneath the galleries and the entrance. The main floor held the plants, standards and bushes. As they were placed they made a bank of flowers, the tall standards bringing up the rear. They showed to best advantage there, because the shorter bushes hid their long

bare stalks, which always give the plant a pleasant similitude to a floral stork standing on one leg. These plants were varied here and there by the introduction of well-grown palms, and the shining foliage had a very happy effect. The evergreens were beautified by trailing sprays of bittersweet, to the mystification of many. I heard one fair enthusiast inquire whether all cedars bore similar fruit. All our old chrysanthemum friends

were represented; *Gloriosum* and *Golden Dragon* gave a touch of floral sunshine to their darker neighbors; *Abd-el-Kader* and *Hero of Magdala* displayed their rich crimson all the better among the innumerable yellows. Of course, everyone wanted to see Mrs. Cleveland—not the fair hostess of the White House in *propria persona*, but the new seedling bearing her name. It occupied a central position, and was effectively arranged among feathery ferns, the vase wreathed with a scarf of our national colors. But the jewel was scarce worthy of its setting; it is certainly not so good as its parent, President Cleveland. It is a quilled Japanese, greenish white in hue; the petals are scant, and, like *Cassius*, it has a lean and hungry look. This flower was tremendously written up, because of its taking name, but I hardly think it possesses any staying qualities.

Silver Chalice is one of the finest new seedlings; its name describes it admirably, both in shape and color. Thorpe Junior is another excellent golden-yellow seedling; Margaret Thorpe, also new, shows an odd combination

of crimson and buff. There were some cut blooms of marvelous size and beauty; they were, of course, grown on disbudded plants, where the vigor of a whole bush goes to the perfecting of a single flower. Some of these plants were shown; they have an odd look, with the single stem supporting one huge flower.

By the way, there was one Japanese variety, *Admiration*, which fully justified its name. It was a beautiful tender pink in hue, without the almost aniline tint usually seen in these flowers; although it was not a genuine salmon pink it was not very far removed from it.

The display of designs was not all it should be. The few vases and baskets were really poor, not through want



JAPANESE VARIETIES

of good flowers, but because the makers had fallen into the common error of using light and delicate green, such as would harmonize with roses and other fine flowers. This class of foliage always makes chrysanthemums look coarse, almost tawdry: its use is an æsthetic mistake. The screens showed similar error. One panel, with background of crimson leaves, bearing a trailing scroll of white chrysanthemums, was really beautiful. Other panels, bearing Japanese designs, showed clever workmanship, but were too set and conventional to be admired. Another exhibitor, who showed a Japanese paper-screen decorated with loosely-filled china vases, displayed an original conception poorly carried out. Had the colors been chosen with more regard to harmony the effect would have been very graceful.

There was one very large design, displaying clever workmanship, which might be commented on with more confidence if its meaning or purpose had been more apparent. It might have been a floral octopus, or perhaps it was a geometrical frenzy of the designers, but, at any rate, it had a lot of Briarean arms bearing globes of goldfish. It was well made, with good flowers, but the goldfish were a mistake.

There was one innovation at this show that caused much unfavorable comment. This was the substitution



POMPON VARIETIES.



CHINESE VARIETIES.

of numbers for names on the plant labels. In consequence, everyone had to buy a catalogue, and instead of readily ascertaining a name, one had to wade through a whole list. Then people have a playful habit of picking up a label and carefully placing it on the wrong plant, so the accuracy of the number was often to be viewed with suspicion.

Two native artists from the Japanese village were present, in little bamboo cages unfurnished, after the Japanese style, where they painted wonderful chrysanthemums on satin, amid many curious gazers. Distinguished visitors were many, members of the Japanese and Chinese Legations viewing their native flowers with much interest.

It seemed a general opinion that the management was a little unkind in reserving all the balcony seats. This did not appear to be generally understood, for often weary sightseers would casually sit down, and immediately were pounced upon by an attaché, who demanded a coupon or equivalent, à la Jesse James.

The final verdict of this show would be that it was not so fine in many respects as the preceding one, but the great number of plants, good hall and excellent music made it very attractive, and the public interest showed no diminution of the chrysanthemum craze.

E. L. TAPLIN.



ANEMONE-FLOWERED CHRYSANTHEMUMS.



SINGLE-FLOWERED CHRYSANTHEMUMS.

CAMELLIAS DURING WINTER.

THE following article, taken from *Gardening Illustrated*, is a fitting answer to many queries that we receive. It will explain the causes of failure which are so frequent with amateurs and, at the same time, show how easily the camellia may be managed to give satisfactory results:

"Amateur cultivators of camellias often find not a few difficulties in the way of managing and flowering them successfully, especially during winter. The plants drop their buds at a time when the cultivator is looking hopefully for a pleasant head of bloom. When housed for the winter watering must be carefully done, for the giving of either too little or too much will cause the buds to fall off, and the whole season's labor to be lost. What actually causes the buds to fall is the question that exercises the mind of the disappointed cultivator. A bad system of watering has something to do

with it. A little water applied frequently—that worst of all known forms of mismanagement—will render the soil moist, and in some cases even sour, half way down the pots, while the lower part of the ball may be as dry as dust. There is nothing more difficult than to get persons to observe this simple rule: 'Never water till a plant really requires it, and then soak it.' An uncongenial soil is also a cause of bud-dropping. Many, knowing that camellias cannot grow in a strong, heavy soil, mix for them peat and loam; but this results in a sour soil, in which camellias become unhealthy. Sods cut as if for forming a grass plat, taken from a sandy loam—particularly if it grows foxglove, heath or fern—chopped, or, better still, pulled to pieces when quite fresh, form the best soil for camellias, without any admixture. If not sandy enough, silversand may be added. If a suitable loam cannot be obtained the next best soil is a good

fibrous peat, unmixed with anything else. Peat soil ought never to be mixed with anything except white sand, if sand be required. Camellias often do well in pure peat, particularly when assisted with a little weak guano water or soot water when growing. The former must be very weak—certainly not more than one ounce to a gallon of water, given once or twice a week.

"Another cause of camellias dropping their buds is doubtless a poor, exhausted soil from which the plants gain little or no support. A plant, too, which has formed its buds under glass is often turned out of doors, where it is liable to be soaked by heavy and continuous rains, and is night after night exposed to heavy dews. Under these circumstances it will often look healthy; but when brought into a glass-house and subjected to a dry heat, with possibly not enough water at the roots for days together, it is not surprising that the shock produced by so great a change should be injurious. Many a plant also suffers

from the extreme dryness of the air during frosty weather. I have often been obliged to water the pathways during frost, and sometimes have even had the evaporating troughs filled with water in winter. Perhaps, however, the most frequent cause of the shedding of camellia buds is excess of moisture rather than too little of it. The amateur grower should so manage as to keep the soil in which the plants are growing something between dry and damp. When water is administered it should be of the same temperature as that of the house in which the plants are growing. Cold currents of air playing directly on the plants are also injurious at times."

Camellia Japonica may be regarded as the parent of the whole race of cultivated camellias. It is a native of China and Japan, where it attains the altitude of a tree. Many fine varieties have been raised in this country from seed, but the usual mode of propagation is by cuttings.

SWEET ALYSSUM.

I PRESUME that most if not all of the readers of THE FLORAL CABINET are well acquainted with the pretty little plant known as the sweet alyssum, *Koniga maritima*. If not, they should be, for whether used for summer blooming in the greenhouse or window-garden, the ease with which it can be cultivated and the delicate, honey-like fragrance of its flowers render it most unlikely that it will ever be cast aside, its pretty little white flowers are so useful in making up bouquets and other floral work. The *koniga* belongs to the natural order *Cruciferae* and is a native of England. It is a plant of trailing or procumbent habit, having shrubby stems, and bright-green linear lanceolate leaves. It is a plant easily cultivated, doing best when given a sunny situation and a well-enriched deep soil, and if good, strong plants are set out about a foot apart early in May, they will flower all summer long and continue to do so until destroyed by severe frosts. As a plant for the window-garden the alyssum is unequalled, and it is the pride of many a window-garden during the winter months. When wanted for this purpose the plants should be grown in pots plunged in the open air during the summer and not permitted to bloom until brought inside. They should be placed in their blooming pots or baskets early in September. In potting use a compost of two-thirds of well-decayed sod and one-third well-decomposed manure, thoroughly mixed. Water must be given when necessary and give liquid manure once or twice a week. As the plants dislike too much heat a temperature of from 45° to 50° is amply sufficient. They also dislike too dry an air, and on this account it is advisable to spray them occasionally; this will also keep the red spider in subjection, as the plant is, unfortunately, very subject to this pest when grown in the window-garden, and it seems almost superfluous to remark that, in order to have the plant in perfection, the pot should be suspended whether the plant is grown in the greenhouse or window-garden.

Of late so much interest has been taken in the alyssum by our florists that they have given us several improved varieties, and all of them are deserving of general cultivation, but as the variegated varieties are not of a rapid growth they should be given a little more attention in the way of liquid manure two or three times a week, in order to encourage vigorous growth. Propagation is effected by seeds and cuttings of the half-ripened wood, and if the young plants are liberally cared for nice specimens will soon be obtained, but the young plants require to be pinched back occasionally and grown in a light, airy situation in order to do well.

Koniga maritima is the well-known single sweet alyssum, and so requires no description. Increased by seeds, which should be sown about the first of March in a well-drained pot, or pan, of rich loamy soil, placed in a warm, light situation and kept moist until the young plants appear; and when they are strong enough to handle transplanted into three-inch pots and grown on until the weather becomes warm and settled, when they can be transferred to the open air.

K. m. variegata is a very pretty form of the above, having the edges of the leaves very beautifully marked. Increased by cuttings.

K. m. colossus, a very robust-growing sort, with double white flowers. The best variety for pot culture as well as for the border. Excellent for cut-flower work. Increased by cuttings.

K. m. The Gem, a new variegated alyssum, having full double white flowers, the light-green leaves being deeply bordered with pure white. A very beautiful variety but, as it is not a strong grower, needs and is well worthy of a little extra care and attention. Cuttings of the half-ripened wood root easily, and when rooted should be potted off into three-inch pots and given a similar treatment to that advised for seedling plants.

CHAS. E. PARNELL.

QUEENS, N. Y.

THE PLANTS OF CHRISTMAS-TIDE.

EVERY season has its blossoms or its plants, each characteristic of its own peculiar month or floral horizon. By this novel classification it would be easy for one to possess a calendar of his own, quite independent of the almanac makers. April, in this latitude, is the month of mayflowers; we associate violets and wake-robin with May Day; dandelions, cowslips and buttercups stand for those long, blue, beautiful days of June which Lowell deems perfect; Fourth of July means pond-lilies and side-saddle flowers; golden-rod and cardinal-flowers come with the burning heats of dog-days; and clematis and fringed gentians are found in September. Thanksgiving brings to us a sniff of the fragrant sage and summer savory and the blooming chrysanthemum. Christmas has its flora, too, a whole cornucopia full; and though all the summer is past and its idyllic pictures of green things growing, mists gathering on the hills, birds making their nests, the harvest-song, and children driving home the cows at night, still the season has its cheer, its floral imagery and associations. As Scott says:

Domestic and religious rite
Gave honor to the holy night;
The damsel donned her kirtle sheen;
The hall was dressed with holly green;
Forth to the wood did merry men go
To gather in the mistletoe.

The mistletoe, which plays such an important part in Christmas merrymakings, was particularly venerated by the Druids. As found growing on the oak, and having no attachment to earth, they believed it to be of celestial origin. Its berries of pearl were symbolic of purity and were associated by them with the rites of marriage. Chaplets of the mystic flower were worn about the head, a practice to which the phrases, "whispering under the mistletoe" and "kissing under the mistletoe," are allusions. The utmost solemnity was used in the gathering of it. The ceremony took place always at the close of the year, when the moon was just six days old. Two white bulls, which had never felt the yoke, were fastened by their horns to the fortunate oak whereon the mistletoe had been discovered. A priest clad in a white vestment then ascended the tree and detached the plant with a golden hook or sickle, whilst others stood ready to receive it in a white woolen cloth. This done, they then prepared to offer the best of their flocks and herds in sacrifice, "mumbling many orisons, and praying devoutly that it would please God to bless this gift of His to the benefit of all those to whom He had vouchsafed to grow it." Water in which it had been steeped they considered a panacea for diseases of every description, hence the name they gave it, "omnia sanans," or "all-heal."

The mistletoe family comprises about thirty genera, all of them parasitic. The American species differs so much from the European that it has been classed as a separate genus. It has the same manner of growth and its berries

are white, but its stems are of a more yellowish green, the structure of the anthers is different and the flowers appear in short catkin-like jointed spikes and sunk in the joints. There are several species scattered over the United States, differing in the shape and smoothness of their leaves. They grow upon various deciduous trees, and in Texas the mistletoe is especially abundant on the mesquite, upon which it often grows in such quantities as to hide the proper foliage of the tree.

The holly, *Ilex aquifolium*, is another plant closely interwoven with the superstitions of the Christmas festival. With its dark glossy leaves and rich red berries it has been used for winter decoration since the time of the Roman Saturnalia, and it has entwined itself about the religious observances of every people. An old Christmas carol celebrates the victory of the holly over the ivy, the former being regarded as an emblem of Christmas and the latter a symbol of the world.

Several popular superstitions exist with respect to holly. In Derbyshire there is a tradition that, according as the holly brought at Christmas into a house is smooth or rough, the wife or the husband will be the master. In the county of Rutland it is considered unlucky to introduce it into the house before Christmas eve. Holly that has adorned churches at that season is in Worcestershire and Herefordshire much esteemed and cherished, the possession of a small branch, with berries, being supposed to bring a lucky year; and Lonicus mentions a notion in his time, vulgarly prevalent in Germany, that consecrated twigs of the plant hung over a door are a protection against thunder. A Border proverb defines a habitual story-teller as one that "lees never but when the hollen is green." In England the holly, from its patience of clipping, makes an excellent hedge plant. Evelyn, the diarist, mentions a great holly hedge at Says Court, Deptford, that was four hundred feet long, nine feet high and five in breadth. The plant, with its dazzling verdure, is the last ornament of the forests, and even long after the winter frosts its glittering red berries remain to serve as food for the birds. There are three American species, one of which, *Ilex opaca*, resembles the European tree; but the ink berry and the black alder, or winter berry, are more common. What is called the mountain holly of America belongs to another family, *Nemopanthes Canadensis*.

Other plants that figure in the Christmas festivities of old times are ivy, laurel, rosemary and various evergreens. Frequent reference is made to these plants in the old Christmas carols. Gay says:

When rosemary and bays, the poet's crown,
Are brawled in frequent cries through all the town,
Then judge the festival of Christmas near;
Christmas, the joyous period of the year.
Now with bright holly all the temples strew,
With laurel green and sacred mistletoe.

The rosemary (*Rosmarinus officinalis*) was formerly

believed to possess many occult virtues ; it strengthened the memory and softened obdurate hearts. Says Ophelia in "Hamlet ;"

There's rosemary, that's for remembrance ; pray, love, remember.

And in "The Winter's Tale" Perdita says to Polixenus :

Reverend sirs,
For you there's rosemary and rue ; these keep
Seeming and savor all the winter long ;
Grace and remembrance be to you both.

Rosemary was the emblem of fidelity, and was accordingly used at weddings and, on the same principle, at funerals. A sprig of the plant was employed to stir the wassail-bowl before it went the rounds of the banquet.

No Christmas feast in "Merry England" would have been complete without the laurel and the ivy. Branches and sprigs of the former were flung on the Christmas fire, while omens were sought in the curling and crackling of their leaves. Spenser terms the laurel "the meed of mighty conquerors ;" it was also regarded as the appropriate reward of poets, orators and philosophers. Hence its use at Christmas-tide, when minstrels and poets won the "bays" by their sweet songs.

The ivy, emblematical of faithful love, was a sacred plant among the Greeks, the Romans and the Celts. In Greece the altar of Hymen was surrounded with ivy, a sprig of which was presented by the priest to a newly-married spouse, as a symbol of an indissoluble knot. The Bacchantes, old Silenus, and Bacchus himself were crowned with ivy. In that inclement season of the year when Christmas occurs, it clothes the object around which it is entwined with its own foliage, shielding the blackened boughs from the hoar frost and icy rain. What could be more appropriate for the Christmas festival than

garlands of this plant, with its associations and emblematic heraldry ?

There is a species of whitethorn which blossoms about Christmas time, and which once attracted the attention of the curious. For a long time it was believed to blossom only on Christmas Day, and the superstitious wove a number of legends about it. Nearly everyone is familiar with the story of Joseph of Arimathea and his staff which he planted when he landed in Britain on Christmas, and which was said to have blossomed amid the ice and snow. The staff thus planted became, so they say, the famous thorn-tree of Glastonbury, and ever after the whitethorn blossomed at Christmas, "mindful of the Lord."

This story of the holy thorn was for a long time credited, and many went miles every year to see it blossom.

The following is the legend told in verse, as it is still repeated in Somersetshire, in the neighborhood of Glastonbury :

Who hath not hir'd of Avalon ?
'Twas talked of much and long agon—
The wonders of the *holy thorn*,
The which, zoon after Christ was born,
Here a planted was by Arimathé,
Thie Joseph that com'd over sea,
And planted Christianity.
Thà zà that whun a landed vust
(Zich plazen was in God's own trust).
A stuck his staff into the groun,
And over his shoulder lookin roun,
Whatever mid his lot vevall,
He cried aloud now "Weary all !"
The staff het budded and het grew
And at Christmas bloom'd the whol dà droo,
And still het blooms at Christmas bright,
But best thà zà at dork midnight.

F. M. COLBY.

AT CHRISTMAS TIME.

WHAT shall we see at Christmas time ?

A throng of happy faces,
Clear, smiling eyes, and fair, smooth brows,
Where care has left no traces ;
The pent-up Christmas mirth
In ringing laughter breaking,
And all day long, for loving hearts,
Unconscious music making.
Yet would we know one joy more bright
To crown home's tender story ;
Then let us lift our hearts and pray
That we may see His glory.

What shall we see at Christmas time ?

The mirth and laughter vanished ;
While many a tender, playful rite
By mute consent is banished ;
Eyes that must droop to hide
The heart's swift overflowing ;

Lips that their loving greetings breathe,
Some long-loved names foregoing.
Yet would we know the light that shines
Above earth's checkered story ;
Then let us pray that through our tears
We may behold His glory.

What shall we see at Christmas time ?

Pillar and archway brightened,
Chaplet and wreath of clustering green,
With scarlet berries lightened ;
The preacher's earnest gaze,
The thronging congregation—
Their voices blended high and low
In chant and supplication.
Yet would we know the thrilling joy
Of the sweet Christmas story ;
Then let us pray that through it all
We may behold His glory.—*Anon.*

NOTES ON MISTLETOES.

AT a meeting of the Academy of Natural Sciences of Philadelphia, Mr. Thomas Meehan called attention to some fine specimens of *Phoradendron juniperinum* var. *Libocedri* Engelm., and *Arceuthobium occidentale*, var. *Abietinum* Engelm., from Washoe Valley, Nevada, contributed by Mrs. Ross Lewers, of Franktown, and said it might be worth noting a few facts in relation to mistletoes, which, though perhaps not wholly new to specialists, did not seem to be generally known.

The mistletoe of the Eastern States had a general resemblance to that of Europe, *Viscum album*; but the old genus *Viscum* had been divided by modern botanists, although the lines of distinction were somewhat artificial. We had two genera, *Phoradendron* and *Arceuthobium*. Among the leading distinctions might be mentioned that the European branch of the family, *Viscum*, as now restricted, had the anther open by three pores over slits, our *Phoradendron* by two, while the *Arceuthobium* had but one. There were other slight differences in pollen grains, cotyledons and form of the fruits. The European mistletoe is usually found on deciduous trees only, an instance being recorded where it had been found on the Scotch pine in Germany, and its American representative, *Phoradendron flavescens*, seemed also confined to deciduous trees and shrubs. This extends across the continent, a form being found on the Pacific Coast still confined to deciduous plants; while another genus, *Arceuthobium*, seems wholly confined to the coniferous trees which are mixed with the deciduous ones. The name *Arceuthobium* is suggestive of this fact, it being derived from two Greek words signifying "living on the juniper;" *Phoradendron*, on the other hand, meaning simply "living on, or stealing from trees." *Arceuthobium*, however, did not live wholly on junipers. In the herbarium of the academy was a specimen of *A. occidentale* growing on *Juniperus occidentalis*—these Nevada specimens were on *Pinus ponderosa*. The specimens of *Phoradendron juniperinum* were growing on *Libocedrus decurrens*, which, by the way, was, he believed, the first time this pretty cupressineous tree had been reported from the State of Nevada.

Among the differences noted by Engelm. in the botany of California, between *Phoradendron* and *Arceuthobium*, was that while the former flowered in February and March and matured its fruit "next winter," the fruit of the Californian species opened in the summer and did not mature till the "second autumn." The European mistletoe was stated by Bentham to open in spring, and perhaps this was so; it was formerly supposed to be the case with the American *Phoradendron flavescens*, but Mr. William Canby had shown that in Delaware the flowers opened in the fall and the fruit matured in the autumn of the following year, or just one year afterward. The flowers and fruit were on the trees at the same time together. If this were general with *Phoradendron* it still lessened the distinctions between the genera. Usually *Phoradendron* bore leaves, while *Arceuthobium* was leaf-

less, but the *Libocedrus* parasite was as destitute of leaves as an *Arceuthobium*, and the common observer would see little in their general aspects to distinguish them. But there was one great difference in the genus, at least as represented by these two species. In opening the box which contained the specimens, the whole mass was covered with a dense viscid secretion, which rendered it very difficult to separate one branch from another. On leaving the lid open a little while the watery particles soon evaporated, leaving a dry, gummy deposit over the whole surface. While this was going on, the seeds were ejected with great force from their endocarps, being projected against the face with such force as to leave a stinging sensation. Dr. Engelm. has noted this power of ejection in the berries of this plant. The *Phoradendron* exhibited no trace of any such power, though there seemed to be little difference in the structure of the berries. The facts raised a nice teleological question. Birds did not seem to use the berries. As they were so viscid that the famous bird-lime is made from some species, it is probable the very viscosity would prevent the free use of the beak in any attempt to use the seeds. But it was believed that by becoming attached to the feet or feathers of birds the seeds were widely distributed, and that in this way the plant had all the advantage necessary for distribution in the "struggle for life." But *Arceuthobium*, besides all the advantages to be derived from this mode of distribution, had an additional aid from a projecting force.

Did *Arceuthobium* at one time exist when or where there were no birds, and had it to depend on projection alone for its distributing power, and is the viscosity a later development? Did *Phoradendron* once possess the power, and has it abandoned it from having through the ages found out that it travels well enough without its exercise? Or is it rather, as the speaker himself was inclined to believe, that nature loved to aim expressly at variety, and was continually exhibiting her power to accomplish the same end by a wonderful variety of means? But whatever might be thought of the various theories of development, and the laws of final causes which may have operated to produce changes, there could be but little doubt that parasitism was an acquired habit, and the endeavor to find out what these plants were, and how they behaved before they were parasites, was one of the most interesting of biological studies.

The seeds ejected from the endocarp in *Arceuthobium* fastened themselves to the branches of trees by a glutinous mass at one end. This end was opposite to the radicle, which, in germinating, would have to push out from above and curve downward toward the branch in order to attach itself. He had not seen them during the process of germination, but as the testaceous covering was held fast by the glutinous secretion, it is probable the cotyledons would be drawn out as the plumule took its upright position, leaving the testa as an empty case

fastened to the branch. Presuming that this must be the case with other Lorantheaceous plants, it was difficult to understand the process by which the East Indian species performed the locomotive feat recently noted by Dr. Watt, and which from its remarkable nature has had a wide publication. It was reported as the observation of Dr. Watt that a seed falling on and becoming attached to the coriaceous leaf of a Memecylon, would send out its radicle, which, curving down, formed a flattened disk by which it attached itself to the leaf. But, as if it knew that a leaf could not permanently support a perennial plant, the cotyledons were lifted and turned to the other

side, when the end with the disk moved to another place, and in this way the seed traveled to a more favorable spot. In all plants in our country which fastened to an object through a disk at the end of a rootlet or tendril, as in ampelopsis, the attachment was made while the disk was forming. A disk once formed did not re-attach itself to an object when removed from the original spot. In like manner the cotyledons, once removed from the endocarps, would have no viscosity with which to form a resisting power while the disk was unfastening itself from its undesirable location. The singular habits of the mistletoe family made further observations very desirable.



PANSIES IN DECEMBER.

THE cruel frost has bitten my sweet roses—
 Their fragrant breath is fled;
 Has sapped the life from all the summer posies,
 They lie here black and dead;
 And only pansies in the garden closes
 Smile from their narrow bed.

What though November's snow lay on them lightly
 And nights were sadly chill!
 To-day they lift their hooded heads as brightly
 As it were summer still.
 Ah, heart of mine, could'st read their message rightly,
 New hopes thy depths would thrill!

More precious than a garden full of flowers
 That bloom in summer's prime,
 Are these that grace the heavy-winged hours
 Of barren winter time;
 As brave and gay through snow-storm as in showers—
 In cold or sunny clime.

Ye seem to me the year's sweet, parting love-gifts
 Till spring shall come again;
 And every flow'r that here its dainty face lifts
 Brings thoughts half joy, half pain.
 I'll dream of you still blooming 'neath the snow-drifts
 When fierce winds scour the plain.—*Selected.*



LITTLE FLOWER FACE.

"SHE has a face like a flower, Esmond; I wished I had named her Violet. She makes me think of one of those golden-rimmed pansies with the white centre and the deep blue eyes. Can't you see the resemblance, you blind papa? Oh, Esmond," growing suddenly serious, "if anything should happen to her I should die!"

Esmond Delaney looked down upon his wife and the lovely child in her lap with a contented, reassuring smile.

Both wife and child were perfect in his eyes, and the loving enthusiasm of the mother over her beautiful child found a responsive echo in his heart, though he uttered no words in reply as he bent and kissed each, lovingly, and patted little Lena's golden head, then stepped down and away with a cheery "Good-bye!"

Two voices echoed the words in concert, and throwing a double kiss he disappeared behind the great clump of sweet syringa bushes.

But little Lena did not seem satisfied. She sprang down and ran away after her father to have "one more good-bye," she said; at the end of the path she climbed the gate and, waving her hand, shouted her last good-bye in a little piping treble which made her mamma smile as she heard it.

Lena did not return immediately, which did not alarm Mrs. Delaney, as the child often spent hours in the grounds with the old gardener; she rose soon and went into the house to attend to some duty which she suddenly remembered, and became so absorbed that not till three hours later did she go in search of her little girl; even then she felt no anxiety concerning her, only a mother's longing to hold and caress her.

But no Lena could she find; all over the grounds she went looking in every little corner, behind rockeries and mounds, expecting every moment to see the child spring out eager for a frolic, or perhaps willing to be taken in to rest, as it was her usual hour for a nap; but as she went on and on, and was still unsuccessful, she began to grow nervous and excited. The old gardener, beginning to share her anxiety, at length joined in the search, and gave over and over again the little information he possessed regarding the child, which was to the effect that he had last seen her playing around the pansy bed, down by the gate, soon after she ran to bid her father "good-bye." He had then been called to another part of the grounds, and had not seen the child since.

After an hour's fruitless search by a troop of servants, who each loved the child and did their best with unfeigned interest, Mr. Delaney was summoned and an organized search was immediately commenced.

Day and night they sought, till it was deemed a waste of time and strength to continue the local search longer, when it was given up, and the reliance of the heart-broken parents was placed upon the efforts of detectives and the

possible results of reward notices posted conspicuously everywhere.

Days, weeks passed on leaden wings, till at length the time of their bereavement might be measured by months, and Mrs. Delaney, pale and shadowy in features and form, seemed about to verify her own words to her husband on that fatal June morning five months before, and die of grief, because something had, indeed, "happened" to her darling.

It was only the uncertainty as to what had befallen her child which kept the mother alive.

The sad certainty of a little flower-covered grave to tend would have been better than the torturing fears and suspense which she now endured. Oh, to know where the little golden head rested at night, if her darling was yet alive, and, if dead, what a relief it would have seemed to have the knowledge conveyed to her, that she might at least mourn her as dead in peace. Many hours she spent down by the great pansy bed where Lena had last been seen. The place was as sacred in her mind as a nook in a burial-ground, and she would stand as reverently by the beautiful flowers as if they grew over a grave, indeed.

She gathered the pale-yellow rimmed pansies with the velvety blue eyes till there was scarcely a bud left, but the old gardener had never a harsh look for her. He patiently worked at them to keep them in profuse bloom for her, and was glad that she found the consolation which he knew she did in holding the lovely flowers to her face and bosom and having them always near her.

For, as old servants always will find out the heart secrets of the masters and mistresses whom they love, he had learned of the resemblance which the lonely mother traced in the pale, sweet pansy faces to that of her little lost Lena, and respected her feelings sacredly.

One soft October afternoon, when the woods were ablaze with autumnal tints and a haze rested over everything, Mrs. Delaney, wearied by an hour of restless pacing here and there over the grounds which were so full of beauty, of which she had seen nothing appreciatively, excepting the lovely pansies, returned to her accustomed seat on the piazza, where she was shortly joined by her husband.

He spent every hour with her which he could possibly spare from his business, and was contemplating a Southern trip for her benefit, now that winter was approaching, thinking it might do something toward restoring her health of mind and body.

He came now to broach the subject to her, and, feeling certain of opposition, hesitated as to the manner in which he should set the matter before her.

He knew that she would not be willing to leave the scene of her sorrow, every association of which was connected with her lost child and endeared to her thereby; and the pansy bed, with its centre plot of pale-yellow

rimmed pansies, was such a source of consolation that he really feared to take her away, while still feeling that the change would be likely to prove beneficial to her. Indeed, to have always with her that peculiar variety of pansies, which she always chose, had become a mania with her.

She greeted him with a piteous attempt at cheerfulness, and he was coming gradually to the important subject of the Southern trip when a very singular couple came up the path and slowly approached the piazza—a rough, shabby-looking man leading a tiny boy, who looked with eyes that were filled with wonder, as if just awaking from a dream, and, as his companion commenced to speak, he fixed his dreamy gaze upon the face of the lady, who in her turn fixed her gaze on him as if fascinated.

"Here she is, mum—little Flower Face we called her—and I'm glad the day has come when I can give her back to you. I didn't feel right about it none of the time, but you see, mum, 'twas just like this: Jen, she was half cracked at her own little one's dying, and one day when we two's on the road we come along here and Jen she got her eyes on this little one and I couldn't get her on nohow without she could have her to take along. She tuk on so that I give in at last; I couldn't bear to deny Jen much after she got crazy. But Jen's dead now—died a month ago—and I've been on the road with this little one ever since. Jen got her mind just before she died and made me promise, but I should ha' done it anyway. Jen told me to tell you, mum, as she'd always been good to your babby, and to tell you, too, mum, that she couldn't ha tuk her if her head had been right, and would you please forgive us, mum; me, too, because I done it for poor crazy Jen's sake."

Before he had spoken a dozen words Mrs. Delaney had ceased to listen, but centred her attention upon the child. She sat in her chair, unable to rise to her feet, while the little child, with an air as if at last awakened, climbed wearily to her side and into her lap.

"Take me, mamma; I'se so tired," she said, and as she nestled in her mother's arms, dirt, boy's clothes and all, it seemed to that poor, half-fainting mother as if the very bliss of Heaven could not be more satisfying than the embrace of those little arms, soiled and roughly clad though they were.

After gathering the sense of the rapidly-spoken words of the tramp, Mr. Delaney joined with a thankful heart in welcoming home his restored child, who, in the matter-

of-fact manner of most three-year-olds, took everything very coolly; a look which they saw in her sweet eyes and an occasional long-drawn breath betrayed, however, a deep content, which she could not express so well in any other way.

The stranger looked on with an air of perfect satisfaction, till at length Mr. Delaney turned his attention toward him again, when he resumed:

"We put the boy's clothes on her and cut her hair short, so as she wouldn't be known, sir, and if you please, sir, I'll go. And I hope you'll forgive Jen and me and call it square, as you've got the little one safe and sound. I never'd a-done it only for poor Jen." He replaced his ragged hat and was turning away.

Mr. Delaney could find no hardness in his heart toward the man, although he had been the cause of much suffering to him and his. So, seeing he was worn and weary, he called him back and offered refreshments, which were thankfully accepted; and when he parted with him at the door he placed a bank note in his hand, half doubtful of the advisability of so doing, yet preferring to run the risk of doing a foolish thing rather than miss the chance of doing good to a fellow creature, through a fear of bestowing alms undeservedly.

Besides, had he not offered a reward? He smiled to himself at the idea of rewarding the criminal, yet he gave the bill, which represented no small sum, beside a great deal of gratitude, and felt content and at peace with all the world.

The man took the bill without noting its denomination and half hesitated in doing so. But seeming to think the matter rapidly over, he took it with words of earnest gratefulness, and Mr. Delaney felt certain that he was not wrong in believing that he was doing a good deed.

"Good-bye, little Flower Face," said the man, with feeling, as he raised his hat to mother and child in passing the piazza on his way out to the road.

The child kissed her hand and said a "good-bye" in which there was a tinge of childish regret. She was in the full glory of her long disused garments of muslin and lace, and but for the cropped hair and sunburnt skin she was the same as ever, and happy as a queen. And the little mother? No pen can describe her rapture.

She thinks often of poor "crazy Jen," whose last days were soothed and made happier by the presence of her "little Flower Face," and can hardly find it in her heart to begrudge her the blessing, though it cost her so many days and nights of misery.

MRS. C. H. POTTER.

DOUBLECHIN'S CHRISTMAS.

"LESS play that 'twas a Christmas tree, and that 'twas in our house, and that all these pretty things were presents for mother and you and me."

"Oh, yes! that'll be boss fun!"

"P'r'aps 'twould be greedy for us to play they was all urn. Less make b'lieve that some of 'em are for Mamie Clark and Sallie Brown and—"

"And for Ned Griffens and Bill Saunders and Charley Smith and all the rest of the fellers."

"All right! ain't it fun! That nice, warm shawl, I guess is for old Em'ly Gray."

"And them slippers is for Mr. Gray."

"And them mittens is for Mamie Clark; and that darlin' 'tittle doll must be for Sallie Brown."

"I'll bet that red comforter is for Ned Griffens, and Charley Smith, I guess, is goin' ter get that rubber ball, and them candy bags are goin' to be divided up 'mongst the other fellers."

"But what is mother goin' ter have? Oh, I know! Them rubbers and that caliker dress—my! ain't it splendid!"

"You bet! And that hood, I guess that's hern too."

"Won't she be tickled 'most to death? Now less see what we're goin' ter have."

"I hopes for them skates."

"And I think them stockin's are for me."

"I wonder if that fur cap ain't mine? I'm goin' ter play it was. How warm it feels a'ready!"

"Jimmie, I've got an idea!"

"What is it?"

"Less hang up our stockin's jest like the Mortimers do."

"What's the use? Wouldn't git nothin'."

"But we can play we will, you know."

"That's so. But where are we goin' ter get the stockin's, Lizzie. I hain't got none, and yourn is so full o' holes they won't hold nothin'. Guess you didn't think o' that."

"P'r'aps somethin' else 'll do. I know! We can git a couple of paper bags up to Bacon's grocery store, and we can make b'lieve they're stockin's."

"And they'll hold more things, won't they? All right! Less hurry, 'fore Bacon shuts up."

And the children, taking hold of hands, went off up the street with a skip and a jump.

Old Mr. Doublechin, who had been standing behind the children all the while, did not let one word that either had spoken escape him. He had closely scanned the little pair and could tell you that they were thinly clad, but that their faces were clean and wholesome-looking, and that their clothing, though so patched that it might be difficult for a stranger to tell the color or material of the original garments, was nevertheless tidy and even becoming. He guessed that this boy and girl—the boy about six and the girl perhaps two years older—were children of a widow in straitened circumstances, and saw that their chance for getting Christmas presents was very slender. But he also saw that, spite of their own poverty, they were happy and hopeful, and, still better, they were not unmindful of others poorer than themselves.

Mr. Doublechin smiled, then he chuckled, and then he started up the street at a rapid gait, talking and laughing to himself, until he was quite out of sight.

"Please, Mr. Bacon," said Lizzie, "will you give Jimmie and me two paper bags?"

"And what in the world do you want two paper bags for, Lizzie?" asked the grocer, in a surprised, but not unkindly, tone.

"We want 'em for Christmas," replied Lizzie, blushing at her own temerity.

"To hold all our presents," boldly added Jimmie.

"Oh! to hold your presents? Ha! ha! Well, I guess these'll be big enough." And Mr. Bacon, who was a good-natured soul, though somewhat brusque in his manner, handed out two good-sized bags; bethinking

him, however, to put a nice rosy-cheeked apple in each before doing so.

"I think there's something in these bags, Mr. Bacon," said Lizzie.

"Well, never mind," replied the grocer. "You're welcome to anything you find in 'em, only don't bother me now. Awfully busy to-night. What did you wish, sir?" turning to a pleasant-faced, elderly gentleman who had just come in.

As the latter turned his face to the light to reply, the countenance of Mr. Doublechin was disclosed. "Can you tell me," said he, "who those children are that just went out?"

"What, that boy and gal? Oh, them's Widder Grimes' young ones—live down in the holler, you know."

Mr. Doublechin made further inquiries, and was told that William Grimes, who was a soldier in the war of the Rebellion, had lost his right arm in the service, which prevented him from resuming his trade as a printer; but he had managed to make a living by doing odd jobs for the tradesmen about town, until he was suddenly taken down by the breaking out of an old wound in the breast. He lingered along for some six months, and when he died there wasn't money enough left to bury him, much less to pay the doctor. Since then, two years or more, his widow had just made out to keep body and soul together and rear her little ones as best she could by taking in washing.

"But," concluded the grocer, "the Lord only knows how she's done it. She's had a hard time on't, a mighty hard time on't."

Mr. Doublechin thanked the grocer, and after asking the nearest road to the "holler," bid Mr. Bacon a cheery good-night and departed.

Two hours later there was a knock at Widow Grimes' door. Mrs. Grimes arose to answer the unwonted summons at that time of day—it was past nine o'clock—and upon opening the door, who should she see but our old friend Doublechin, with his arms full of bundles.

"Mrs. Grimes, I believe?" he said, walking in without waiting for invitation, and laying down his parcels, taking off his hat and throwing back his overcoat, he sat down in the nearest chair, puffing and blowing after his long walk.

Mrs. Grimes hardly knew what to make of it—that is what she remarked to Mrs. Griffens next day. "But," said she to Mrs. Griffens on the same occasion, "he was so pleasant-looking, and had such a comfortable way about him, that I didn't feel one bit afraid—that is, you know, after the first two or three minutes—and before I knew what I was about he and I were talking away as chipper as though we'd known each other for years."

"Children abed?" asked Mr. Doublechin, after a few words about the weather and other universally interesting topics.

"Yes, sir," said Mrs. Grimes. "They're abed and asleep at last, I believe; but I thought they never would go to sleep. They've been talking about Christmas, you know. Poor things! they were just as happy to-night, talking over the presents that Santa Claus was going to

bring to them, as though they really expected the nicest things imaginable. Just look there." And as the widow pointed to the mantelpiece she was unable to hide the tears that coursed down her sunken cheeks.

Mr. Doublechin turned about to look in the direction indicated, and laughed loud enough to waken anyone but a child in its first sleep as his eyes fell on those two paper bags, one at each end of the mantel. It seems the children had feared that Santa Claus might not understand why they were hung there, and, to make sure Lizzie had printed on each, in somewhat irregular characters, this legend:

STOCKiNg.

"Ha, ha!" laughed Mr. Doublechin, "if Santa Claus can't understand that he'd better go to school for a year or two."

Mr. Doublechin suddenly grew mysterious. He put his forefinger to his mouth and began looking around the room as though he expected somebody to pounce in upon him then and there and carry him off, goodness only knows where. Presently both he and Mrs. Grimes were busy as two navvies when the boss is looking on, and it was a half-hour or more before Mr. Doublechin had said good-night and Mrs. Grimes had bolted the outside door for the night. But it was long after that when she retired. What in the world could make her cry so after Mr. Doublechin went away? She certainly looked brighter and happier than she had looked since that sad day when William was laid beneath the turf in the old graveyard over by the willows.

Next morning—Christmas morning—Lizzie and Jimmie were up bright and early, and out into the kitchen before they were half dressed.

"Mother! mother! Merry Christmas! Merry Christmas! Oh, *do* get up! and dress yourself just as fast as you can! Something splendid's happened, but we won't tell you one word about it. You have got to see for yourself. But hurry, mother, *do* hurry, 'cause we can't wait a minute."

And the little ones went dancing out into the kitchen, and again began hopping about the room as though they had gone mad.

Mrs. Grimes, the foolish woman, began to weep again, and it consequently took her longer than usual to dress. It seemed like ages to the children, who kept pounding at the chamber door every second and crying, "Oh, mother! *do* hurry! we can't wait another minute, 'deed we can't."

As with all things terrestrial, Mrs. Grimes' dressing came to an end at last. When she opened the door leading into the kitchen she was pounced upon by the little ones and pulled across the room, in front of the mantelpiece, from each end of which depended one of the most crowded, overflowing paper bags you ever saw in all your life.

Mrs. Grimes' tears flowed afresh as she stood there between those two crazy jumping-jacks, though what she could see to cry about would probably have puzzled you quite as much as it did Lizzie and Jimmie.

And then there was such a time in overhauling those

precious bags! And such a succession of surprises! And such a volley of ohs and ahs, and look heres and look theres! Why, you would have thought you were in the midst of a big menagerie, and that every animal in it was making all the noise he possibly could.

And it did seem as if those bags would never cease giving forth of their bounty. As true as you live there was that very identical nice, warm shawl that the children had seen in the shop-window, and, if you will believe it, there was written on it in big letters, "For Emily Gray." Just think of it! And there were those slippers—the same slippers, mind you, the children had picked out for him—for Mr. Gray, and the mittens for Mamie Clark, and Sallie Brown's doll, and Ned Griffens' red comforter, and Charley Smith's rubber ball, and candy bags enough for "all the fellers" and lots more beside, and the calico dress and the hood and the rubbers for mother, and the skates and the stockings and the fur cap, and I couldn't begin to tell you what else.

I don't think you ever saw such a time as they had, and I'm sure you never saw so many nice things come out of two common everyday paper bags. The Mortimers on the hill, with all their fine gifts, didn't begin to have such a time, and their presents weren't a hundredth part so precious.

But the funniest thing of all was yet to happen. Jimmie had emptied his bag and Lizzie thought she had got everything out of hers, when, happening to put her hand in once more in order to smooth the bag out before putting it away among the precious things which she intended to keep for ever and ever, she felt something thin, like a card. Pulling it out—what do you suppose it was? Why, it wasn't a card at all; it was only a letter, with Mrs. Grimes' name on the back of it, and only these words, "Merry Christmas! and God bless you!" inside. But I forgot; there was something else in the letter; it was a crisp ten-dollar bill, fresh from the bank. What I meant was, there was no more writing in it, not even so much as a signature to let Mrs. Grimes know who the man was who knocked at her door last night, with his heart and his arms full, and who had laughed so immoderately as he jammed the treasures into those bags.

But I declare if that woman isn't crying again! The tears are chasing each other down her cheeks like the drops on the window pane during a rainy day. Really I've no patience with her. I'd much rather hear the children laugh and scream, or hear the God-bless-hims of old Mr. Gray or the garrulous gratitude of his wife Emily, or even the quiet, low chuckle of Mr. Doublechin himself, when he was told the whole story next day by Bacon, the grocer, who had heard it from John Black, who got it from Mrs. Jones, who had it straight from old Gray himself, who had those slippers on at the time, to prove that he knew what he was talking about.

But to tell you the truth I more than half believe that Mrs. Grimes, for all her tears, was the happiest one of the lot—possibly excepting Mr. Doublechin, the sly old rogue.

—*Boston Transcript.*

HOME DECORATIONS.

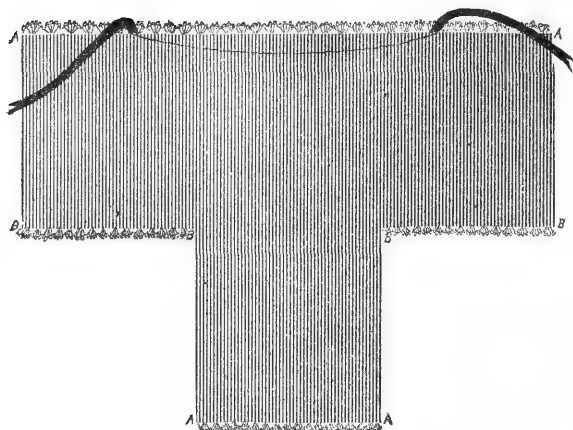


DIAGRAM OF KNITTED JACKET.

Knitted Jacket.

THE best-fitting and nicest sleeveless jacket that I have ever seen was sent from England to a friend a short time since, and was knit after the following directions. To look at the garment when not in use one could scarcely imagine for what it was designed, but when worn it adapts itself perfectly to the form.

If worsted is used, eight ounces will be needed; if "midnight yarn," three skeins. A pair of knitting-needles, the size of a small lead-pencil, will be suitable to use with either the worsted or the yarn.

To make a jacket for a person of medium size, cast on sixty-five stitches and knit forty-two rows of plain garter-stitch. Then, on one end of your needle, cast on sixty-five stitches more, which gives you one hundred and thirty stitches. Knit forty-two rows and then bind off the sixty-five added stitches and knit forty-two rows, as at first. Bind these off and you will have a knitted piece shaped like the one shown in the illustration. Fold up the lower part and lap over the sides to it, so that A meets A and B meets B; sew these parts together. This gives you a bag-shaped knitted piece, with an opening at each side of what appears to be the bottom. It will doubtless look very queer, and you will think an opening to admit the head should have been made, but you will find it is all right as soon as you understand how the garment is to be put on.

Crochet a shell border around the top and around the two small openings, which are really the armholes. Shells composed of six double crochet stitches, finished with a purling, form a very pretty edge. The purling, or picot, is made with the shell. The first double crochet stitch in the shell is worked, and then a chain of four stitches is made and fastened back in the top of the double crochet. This forms the picot, and one is made in the same way after each double crochet in the shell, except the last one.

To put on the jacket, slip the arms through the armholes, draw the lower part around the waist to meet in front. The upper part is rolled over at the back to form a collar. Ribbons are sewed on the front to keep the jacket together, or a clasp is used for the purpose.

It is pleasant and easy work to knit one of these jackets, and the cost of one, without the ribbon or clasp, will be about forty-five cents.

E. S. WELCH.

A Work Handy.

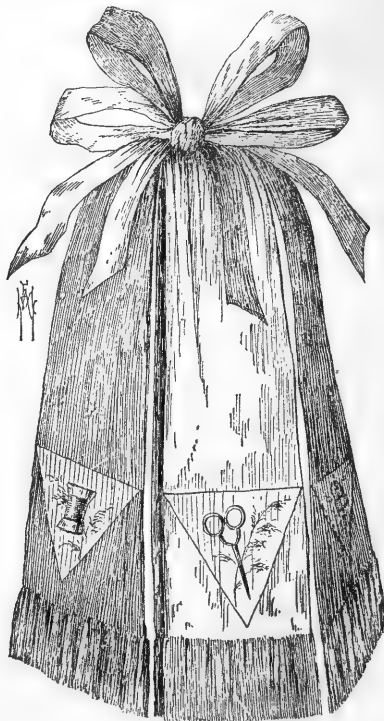
THESE dainty little pockets for holding needles, scissors and thimble are convenient to hang at the side when doing either plain sewing or fancy work.

They can be made of two or four colors, as may suit the fancy. Where four colors are used, pink, olive, blue and gold form a pretty combination.

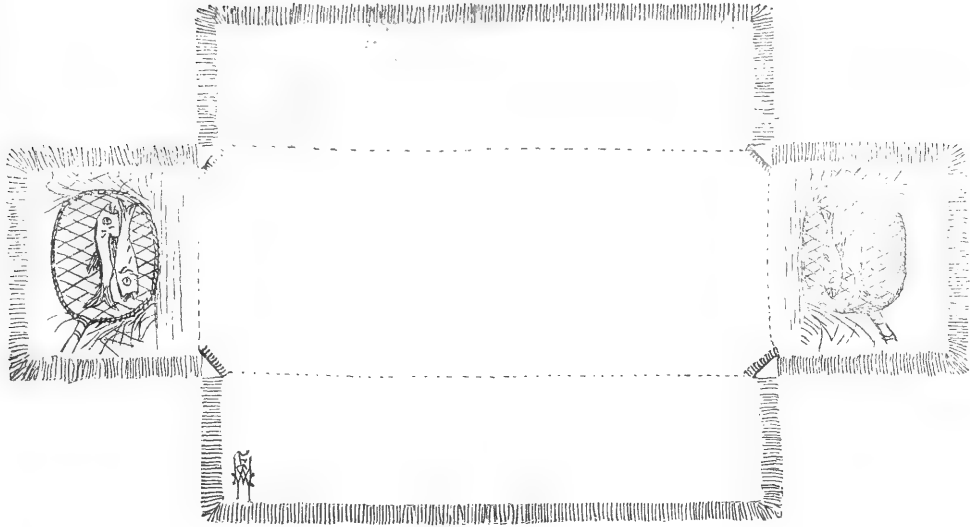
Each ribbon must be sixteen inches long. Sew the blue and gold together, and the olive and pink, letting the seams come on the wrong side of the ribbon.

The lower, or bottom ends, are then fringed out three-quarters of an inch deep, and the ribbon is turned up six inches and creased. Sew each side, from the crease up, three inches, thus holding it together for the pocket. The fringed end, which measures three inches, is left loose and turned down to fall over the front of the pocket, in this way bringing the satin side out.

On this piece a point of bolting-cloth is smoothly



A WORK HANDY.



DESIGN FOR FISH NAPKIN.

gummed. It should be two inches and a half deep at the point, and fit exactly across the ribbon at the top. On this point designs are painted with water-colors. On one, scissors with silver; another, a spool of cotton with silver and white; on the third, a row of pins with gold paint, and the fourth, the thimble, also with gold. Sprays of grasses or leaves may also be arranged with the design.

The ribbons are then fastened together at the top by sewing them strongly together, and then tying them with narrow ribbons matching the colors of the wide. Other colors may be used, and if preferred, two instead of four. Gold and blue, or gold and cardinal, are pretty.

M. E. WHITEMORE.

Design for Fish Napkin.

MOMIE-CLOTH is the best material for this purpose, as it is sufficiently thick when the lapels are folded over to keep the fish hot for some time.

The napkin is made in one piece. The middle or bottom portion, which covers the dish, is fifteen and a half inches long and seven inches wide; the side lapels five inches long and fifteen and a half inches wide; the end laps seven inches wide and eight inches long.

The edges of the lapels are fringed out about one inch deep and whipped to keep from raveling.

The raw edge left at each corner of the middle piece after fringing the lapels should be made firm by working it in button-hole stitch with white working cotton.

The design, which is to be embroidered in outline stitch, is for the two end lapels, and should be worked with red etching silk or working cotton, fast colors, or silver-gray may be used for the fish, green for the grasses and water, brown for the handle of the net, and tan for the meshes, but these colors are not very durable.

Corn, roast-potato or biscuit napkins are all made in the same manner, except the shape, which should be sixteen inches square. Pieces are cut from the corners, leaving each lapel five inches square. The space in the

middle, for holding corn or potatoes, should be six inches square; the lapels are to be folded over this. These napkins are not so narrow as those for the fish.

Appropriate designs should be used for each. For instance, an ear of corn on each lapel of the corn napkin; for potatoes, the potato-flower; for biscuits, several heads of wheat prettily arranged on each lapel.

These napkins are a novelty and very pretty.

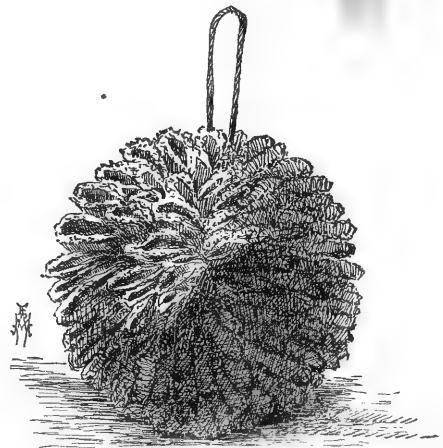
M. E. WHITEMORE.

Ball Pen-Wipers.

THESE little pen-wipers are made of circles of colored cloth, each circle three inches in diameter, and twelve are required for the ball.

Four colors should be used, one for each quarter. Gold, blue, pink and olive form a pretty combination. Three circles of each color should be cut, and gold tinsel laid around the edges and overhanded to the cloth with fine gold-colored silk.

Each circle is then folded in quarters and the points



BALL PEN-WIPER.

sewed strongly, thus bringing the tinsel-trimmed edges together, making four folds or loops of cloth, between which the pen is to be wiped.

All the circles are treated in the same manner and are then fastened together, leaving the tinsel edges out.

M. E. WHITTEMORE.

A Blue-Room.

THE occupant of a well-known cottage in Newport, not finding the reception-room to her taste, had it redecorated according to her own ideas, and though there is no pretension to grandeur, decidedly artistic results have been achieved without going to much expense. The room is described as follows by the *Art Amateur*:

"The walls are covered with light blue 'cartridge' paper, with broad black moldings about a foot and a half apart—the lower serving as a picture-rod—inclosing a blue and white frieze of simple running design. The skirting-board and other woodwork are painted a somewhat paler tint, but not so pale as to lose sight of the part they play as a constructive feature in the room. The ceiling is papered in a very quiet pattern of creamy white, blue and brown; the floor is covered with a plain brown carpet, over which is thrown a heavy Oriental rug, leaving free a foot or two of space all around the room, excepting the larger space in the bay-window recess, broken by a jardinière holding a huge spreading palm, which, while adding to the effect of coolness, is highly decorative. This space is partially screened by a portière of light blue flannel cloth, relieved by broad horizontal bands of dark blue plush, running on a brass rod level with the picture molding. The windows have similar curtains, and are also completely veiled from top to bottom with white muslin. There is a portière as you enter the room similar to the one half drawn before the bay window, and it is backed by another of much heavier and darker material.

"The simple wood mantel-piece is hung with a lambrequin of dark blue plush, and has facings and hearth of tiles colored in blue, brown and white. There is a central chandelier, with glittering cut-glass pendants, and there are small mirrors to reflect the light. The heavier pieces of furniture are covered with chintz, and there are 'occasional' chairs painted in white and gold, with vibrations of the blue note repeated on them and here and there on various small objects, to complete the delightful harmony of the room."

Decorative Notes.

CROSS-BARRED scrim is a new material well adapted to scarf tidies, bureau covers, window curtains and, in fact, to any of the uses for which plain scrim has been so popular. It comes in cream color and in white. The bars or crossed threads are one-quarter of an inch apart, and answer very nicely for working cross-stitch embroidery, which is coming in favor again.

A very serviceable and pretty tidy can be made of a breadth of this cream-colored scrim one yard and a quarter long. Make a hem two inches deep in each end and

finish it with feather-stitch in blue linen floss. The floss comes in nearly all colors, and is warranted not to fade by washing. Above the hem, on one end, work with blue and orange floss a Grecian border in cross-stitch. Then another row of feather-stitch in blue. Leave a space of an inch, and above this draw out enough threads to weave in three very narrow orange ribbons. The Grecian pattern, bordered with feather-stitch, is again worked as at first, and this completes one end of the tidy. On the other embroider only the Grecian pattern, with its border of feather-stitch. Knot a fringe of blue and gold floss in the bottom of each hem, and arrange the tidy on the chair-back by tying a broad blue ribbon around it about four inches beyond the middle, so that the end with the most work will be longer than the other.

Lava work is one of the novelties in decoration. It is produced by a cement or paste which is soft and sticky when applied, but after exposure to the air it becomes very hard without being brittle. It adheres firmly to wood, glass and various other materials, requires no mixing or preparation, and is applied with a knife in such a way as to leave the surface as rough as possible. After drying a day or two the whole surface is painted a very dark blue-green in metallic colors, and when this is dry all the high points are touched up with copper color. Odd-shaped glasses make beautiful antique-looking vases when decorated in this way, and the material is very satisfactorily used to renew old picture frames. For this the lighter metallic colors should be chosen. The paste is called Vesuvium, and is sold in one-pound boxes at fifty cents each.

Very pretty hairpin receivers are made of the little Japanese globe-shaped baskets, such as can be bought for five cents each. A mossy-looking filling is knit of navy-blue split zephyr by winding the worsted around the finger five times with each stitch in every other row. Before the worsted filling is fastened in the opening, five oblong pieces of navy-blue velvet pointed at the ends are arranged around it somewhat like the petals of a sunflower, only they are fastened to the basket; the edges are finished with tinsel and trimmed with Turkish coins.

Another way to arrange these baskets for the same use is to remove the bottom, which is easily done, and this leaves an opening corresponding to that in the top of the basket. The zephyr filling is then placed in both top and bottom, and the receiver is hung by ribbons corresponding in color to the worsted filling.

Some twine balls, shown at a Broadway decorative store, are very attractive little articles, and it is often of great convenience to have a bit of twine just where you can get it at a moment's notice. Inch-wide satin ribbons of one color, or of various colors, as you choose, are overhanded together for a sufficient distance to cover the ball. They are gathered close at the end designed for the bottom, and fastened to a little ring so as to allow the twine to be pulled out freely. At the top the ribbons are folded over to form a little heading above the shirr, which confines the ball, leaving ends about an inch in depth; these are pointed and finished with a tiny gilt bell. Narrow ribbons are used to suspend the ball. The effect is very pretty when satin-faced velvet ribbon is used, as the ball

will then be of velvet, and the heading and pointed ends being the other side out will be of satin.

Little bags for holding shoe buttons, needles and thread are convenient additions to the dressing-table. Two strips of any bright-colored satin ribbon, two inches and a half wide and six inches long, will furnish enough material for a bag. For the top, make a hem three-quarters of an inch deep in one end of each strip, and for the bottom, hem the other ends just wide enough to admit a small whalebone. Sew the ribbons together at the sides, and then sew the strip across twice, making three divisions, the bottom one an inch and a half deep to hold a small spool of heavy linen thread; just above this another division, one inch and a quarter deep, to hold a card of coarse needles, which slips in from one side; the space left is just deep enough to hold the buttons, and a narrow ribbon is run in the lower part of the upper hems for a shirr string. The spool in the bottom section is kept in place by the two little whalebones, between which the thread easily passes, and by pressing the ends a little the spool can be removed when desired. CYNTHIA.

Comfortables.

AT this season of the year, when the careful housekeeper begins to take an inventory of her stock of bedding and to prepare for the coming winter, it is often a perplexing question for those who cannot afford to furnish each bed with a good supply of soft, fleecy blankets to decide what kind of coverings to provide. Almost all dry-goods stores abound in bright-looking comforters that one can purchase at so low a price that it scarcely seems necessary to take much thought about making any at home. But it only requires a few weeks' use of the ready-made article to convince the most skeptical person that it has been sadly misnamed, and should be called uncomfortable. The cheap heavy cotton with which many are filled and the heavy texture of the covering render them unhealthy as well as wearying to those who sleep under them. A lady of our acquaintance, who spent the summer in the country in the vicinity of a

woolen mill, brought home in her trunk enough wool for three lovely comforters, and her experience may be of benefit to some troubled housekeeper. In the first place, wool is very cheap at the mills, being only thirty-four cents per pound, carded in bats ready for use. From one and a half to two pounds will be sufficient for the largest comforter, and it should be carded without oiling. If it is not possible to obtain wool the best quality of cotton should be used, and three pounds will be needed for one comforter.

For the covering, cheese-cloth is the most desirable, and it can be obtained in almost any shade for twelve cents per yard. The unbleached is much cheaper, being six or seven cents for the best. Old-gold is a durable color, but if pink or blue is used one should not choose too pale a shade, as these colors will fade with very little exposure. The lady mentioned made one comforter of old-gold tied in tufts with blue Germantown wool—the deepest of the light shades—and after basting the edges together button-holed them all around with blue, making every other stitch long. Another was unbleached and that was also tufted with the same blue, but the edges were bound a half-finger deep with blue cheese-cloth the shade of the worsted. The binding was run fast on the wrong side and turned over on the right side, and then feather-stitched with blue. A third was of blue cheese-cloth tied with gold-colored wool, and a fourth was covered with a fine light quality of plain turkey-red calico and tufted with gendarme blue. A pretty combination is made by using blue on one side and pink on the other. Two yards and a quarter square is a good size for a comforter, as it will be a little smaller when done. Two yards and three-eighths is as long as can be used. Sheets are two yards and a half and the comforter should be at least an eighth of a yard shorter. It is a great mistake to make bedding too narrow or too long. It seems that as far back as the time of Isaiah housewives made bedding too narrow, for we read, "The covering is narrower than that a man can wrap himself in it."

C. C. H.

HOUSEKEEPING.

Scalloped Clams.

Scald the clams, remove the hard part and chop the rest. Make a soup of the liquor, with enough water added to make it fresh enough, thicken it and make it sufficiently rich with butter. Butter a scallop dish, strew the bottom with bread or cracker crumbs, moisten them with the soup, then spread a layer of clams seasoned with pepper, and continue in alternation till the dish is full, the last layer being crumbs moistened with soup. The crumbs should only be moist, not wet. Bake half an hour and serve immediately. It is very nice baked in scallop shells.

Cottage Steak.

Have some round steak chopped fine at the meat market and provide some nice beef suet. Chop the suet very fine in a wooden bowl and mix it with the beef in

about the same proportion as fat pork would be used in sausage—that is, put in as much as you think it will bear. Season with salt and pepper and put in a very little lemon juice, and, if it is liked, a tiny bit of onion juice. Mix well and make into flat cakes overnight. In the morning boil a few minutes over a hot fire. The suet must be very cold to chop fine.

Meat Croquettes.

One cup of cold meat chopped very fine, one-quarter of a cup of dried bread-crumbs, one teaspoonful of salt, one-half teaspoonful of onion juice, a little pepper, one egg, one-half a cup of stock, or, if that is not convenient, hot water, one even tablespoonful of butter and one teaspoonful of corn starch. Wet the corn starch in a little water, and when the stock is hot add the butter and stir in the corn starch. Beat the egg and pour the hot sauce

on it, then stir in the meat and crumbs and set it away to cool. It is to be shaped into croquettes with the hands and should not be made in too thick shapes, as they are liable to split open when frying. Roll in egg and crumbs and fry in hot drippings and drain on brown paper. Onion juice is obtained by grating an onion. The egg may be omitted when stock is used.

Corn Bread.

One-half pint of white corn meal and an equal quantity of flour, one-half pint of sweet milk, one tablespoonful of sugar, one-half teaspoonful of salt, one teaspoonful of soda and two of cream-of-tartar, or three small teaspoonfuls of baking-powder; two eggs and one tablespoonful of butter. Stir butter and sugar together, add the eggs, then the milk and salt, and last the dry ingredients. The flour, meal and baking-powder, or soda and cream-of-tartar, should be stirred together and sifted twice. Beat thoroughly and pour in a well-greased pan not much deeper than a pie tin. Bake till a broom-straw run in will be dry. Serve hot.

Chocolate Frosting.

One cup of light-brown sugar, one-half cup of cold water, whites of two eggs and one-quarter of a cake of grated chocolate. Boil the water and sugar till it forms a brittle thread as it drops from the spoon. Have the eggs beaten very stiff, and as you pour the syrup on stir them briskly. Pour it very slowly at first till the eggs are warm. Flavor with vanilla and add the chocolate, then beat till nearly cool and spread between three layers of cake and on the top.

Scotch Cake.

One pound of powdered sugar, three-fourths of a pound of butter stirred to a cream, the juice and grated rind of one lemon, a wine-glass of brandy and nine eggs, one pound of sifted flour and one pound of seeded raisins. Separate the whites and yolks of the eggs, add the yolks to the butter and sugar, with the brandy and lemon, and alternate the whites, beaten to a stiff froth, with the flour. The yolks must also be well beaten. Stir in the raisins last.

MRS. C. G. HERBERT.

NOTES AND COMMENTS.

The Chrysanthemum Exhibitions.—The three great exhibitions of the season were held respectively in New York, Orange, N. J., and in Philadelphia. We regret having to say that our own, in point of arrangement, in noble, well-trained single specimens, in all the various classes, no less than in the arrangement of the cut-flowers, was really a poor third in the great race for the most successful showing. There were many causes of the failure, when in reality there was no reason for the New York Horticultural Society's taking the back seat. In the first place, the hall was sadly too small for the exhibits. There should not have been more than one quarter the number of plants staged, which would have given sufficient room for every plant to have been seen in its integrity. As it was, necessity compelled the crowding of plants, until their individuality was lost. There were plants which had received the care that it was possible to bestow on them; they were beautifully trained in all the various forms that have been suggested for them; they were richly furnished with bloom, but so huddled together that the florist's skill was lost, as if in a jungle.

Another great cause for regret was that the flowers were fully a week behind time, and in order to have the plants show at all they had been forced by too great heat, so that when taken into uncongenial temperature and atmosphere they looked sullen and dispirited. Many plants were brought in that should not have left the greenhouse for at least two weeks from the date shown. There was scarcely a well-opened flower on a plant. But they had to come to make up the regulation number, the prize money being the great incentive. A great, and perhaps the greatest, difficulty in the way of success was the fact that all, or nearly all, the work, from the first thought of the exhibition until its close, was done by one, too willing, too unselfish a worker, a man that knows of no

sacrifice too great, whether of time or money, to show to the community the idols of his heart—flowers; that man is John Thorpe.

At Philadelphia, the reverse, in nearly all the causes of failure in New York, was plainly manifest. There was plenty of room for the plants, and all the well-trained, efficient mental and physical labor necessary to conduct an exhibition of the greatest magnitude. Committees and sub-committees were selected from the large number of willing workers that are to be found among the florists of Philadelphia. With such a perfect organization a well-arranged exhibit was only to be expected. It was a natural result. Besides this, they had by far better specimens, the outcome of another week's growth, and the room allotted to each plant was sufficient to prevent the arms of the *Comte de Germany* from becoming entangled in the fair tresses of *Mrs. Wheeler*, an unpardonable intrusion.

At Orange, N. J., the same good taste in arrangement was noticeable, and, considering the fact that this was in a great measure an amateur affair, those in charge are entitled to great credit for making what many good judges considered the finest exhibition of the three.

We do not wish to be understood as saying that the New York exhibition was not a success. It was a great one in some respects; in others it was a great failure. It was a grand success so far as it showed that our florists are capable of doing with the chrysanthemum all that can be done, and that exhibitions can and will be well sustained. It was a failure so far that, with the material at hand, the exhibit was not in all ways what it should have been.

* * *

White Chrysanthemums.—Herodotus tells us that now and then pure white oxen were born among the ancient

herds of Egypt and that these were held sacred for sacrifice. To this end it was essential that not a colored hair could be found upon their hides! This seems an impossibility, and yet, as a fact, he assures us that such perfect examples now and then appeared. It is so with chrysanthemums. Look at all the white varieties ever obtained before Mr. Downton was so fortunate as to rear the snow-white Elaine! Many were considered white and beautiful previous to this, but of all the varieties of chrysanthemums known to-day—and there are many—Elaine is, so far, the best and most useful of all the Japanese kinds. So, also, when we come to the now popular early or summer-blooming race we have nothing equal to Madame Desgrange, which has, indeed, very many of the good qualities which distinguish its fairer and taller sister, Elaine. These two varieties are irreproachable in their way, nor would we willingly cease to remember Fair Maid of Guernsey, Monsieur Astorg, Lady Selborne and a score of other good white-blossomed kinds, and yet there is still room for good seedling white chrysanthemums of all sorts, shapes and sizes. I believe Mr. John Thorpe, of New York, and Dr. Walcott, of Boston, have some wonderful single or daisy-flowered white kinds in stove forms; but it will be a most exquisite blossom and a fine habited plant that will surpass either Elaine or Madame Desgrange. It might be worth while to offer a special prize for the best new white chrysanthemum of 1886-7, and I hope it may be done.—*The Garden.*

If our English friends are looking toward America for the coming of a new white chrysanthemum, they may turn their eyes toward New Jersey, as well as New York and Massachusetts, for there lives another man, E. M. Allen, Esq., who is riding the chrysanthemum hobby, and is a most graceful rider as well, and, for white flowers, we think his Chalice the first in the race. Beside this, he has several other whites that will make competition very lively before they will be second in the race.

* * *

Cosmos.—Our notice of this new aspirant for popular favor has brought us many queries, so that in one notice we will endeavor to answer all. We do not have seeds or plants for sale of this or any other, and we are not in the least interested in the sale of any bulb, seed, plant or flower, other than a kindly feeling toward all who employ our advertising columns to assist in distributing their productions and stocks. To them we would advise our subscribers to look for their supply of seeds. As the plant is an annual, coming into flower quite late in autumn, it is only reproduced from seeds, which should be sown early in March, in boxes, pans or pots. As soon as the plants have made their second pair of leaves pick out into two-inch pots, in which they can remain until time for planting in the open border.

One inquirer asks the history of this plant and if it is one recently discovered. This plant was discovered in Mexico about 1789, as seeds of it sent to Madrid produced plants which blossomed in that year in the Royal Botanic Garden of Spain. It was first described and figured in 1796, by Cavanilles, who called it *Cosmos*,

from the Greek word *kosmos*, beautiful; but this name was afterward altered by Willdenow to *Cosmea*, as being more consistent with the rules of botanical nomenclature. It was grown in England in 1804, but soon lost sight of, probably because of the difficulty of its ripening seeds in that climate.

It is known in all botanical dictionaries as *Cosmea*, but it has recently been brought out or reintroduced under its original name, by whom we do not know. John Lewis Childs has the honor of first sending it out in this country.

* * *

Protect Your Bulbs.—There is no greater mistake in floriculture than the almost universal opinion that bulbs of all denominations are hardy. In a sense they are; they will, when planted in the open border, without having the care bestowed upon them which they deserve, *live* through the winter and flower in the spring much better than they should, or would, if they were not by nature too generous to resent injuries. When bulbs are grown for commercial purposes they are as carefully protected against freezing as plants in a greenhouse would be, solely because it pays to do it and the crop would not be profitable without it. Now, it seems to us a little strange not to do for the objects we love as much as we would for those we only sell. As if the idea of profit was the only one to be considered when cultivating the beautiful.

All Dutch bulbs, hyacinths, tulips, narcissus, crocus, &c., should be so well protected that frost will never touch their roots. In early spring the tops may be nipped a little without any particular harm, but the underground part of the plant will suffer materially if frozen hard. A lily bulb will remain on the surface of the ground all through the winter with but little injury, when if three or four inches under ground it would be killed. In the first instance growth does not commence; the vital principle lies dormant, the same as in the bud of a tree, which no amount of freezing injures until after growth commences; then the slightest breath of cold is fatal to it. It is the same with the lily; underground growth commences in autumn, the machinery of life is in full operation, and, if checked, the whole fabric is destroyed. All lilies the first winter after planting should be so well protected that not a particle of frost can reach their delicate roots, and ever after it will repay all trouble to give them some protection, although in a measure they will take care of themselves by forming over the bulbs a dense mass of roots, through which water will not penetrate, nor the cold, except with great difficulty. But how shall we protect them may be asked. This is the simplest thing in the world, or, at least, in gardening operations. The cheapest and most natural protection is a covering, say four inches deep, of newly fallen leaves; these kept in their places by some brush or pieces of board. It will not take as long to cover a bed of lilies, neither will it cost as much, as to smoke a cigar, and the result will be a mass of lilies from four to six feet high, covered with large, perfect, well-colored flowers, instead of a few half-starved plants with scrawny, sickly blooms that in no way represent the species.

1886—1887.

WITH this issue of THE LADIES' FLORAL CABINET it completes its fifteenth year, and how well it has done its work others can speak less disinterestedly than its conductors. No year's close has come with more satisfaction in the variety and the value of the contributions, from many pens, which we have placed before our readers. No year perhaps has shown larger earnings; no year when it has served as many advertisers as during 1886, and the engagements for 1887 already made are most encouraging.

Without boasting unduly, it is proper that we should be permitted to add that 1887 will find as much to instruct and to inform our readers upon the various phases of floriculture as any year in the past, and as new writers are available they will be added to our corps of contributors, which already embraces many of the leading writers on floriculture in America and in Europe.

We should be glad to hear more frequently from the amateurs as to difficulties and successes which they meet with, and also from the gardeners to amateurs in all parts of the country. An interchange of experiences and observations would be mutually beneficial.

The congratulations of editors and publishers are cordially extended to our readers everywhere and with many hopes that our journeying together through 1887 may be as pleasant as during the past.

Literary Notes.

In our pages this month we present the announcements of a number of publishers who have books adapted to the season and for each we bespeak the consideration of our readers.

HOUGHTON, MIFFLIN & CO. follow the attractive calendars of previous years by adding to the list several new ones, among which we have seen the "Holmes" and the "Whitney" calendars for 1887. They also send us that touching and interesting story by Elizabeth Stuart Phelps, "The Madonna of the Tubs," and an arrangement by Lucy Larcom of "Beckonings for Every Day," a valuable and an interesting collection of choice, suggestive thoughts for every day in the year.

WHITE, STOKES & ALLEN also issue calendars of rare merit and attractiveness; new editions of Red Line Poets; old favorites in their exquisite new "Ivcrine" bindings, and further issues in their "Bird Song Series."

D. LOTHROP & CO. always have something to attract buyers at holiday time, and they enumerate at length some of their offerings for the adult as well as the young readers of the FLORAL CABINET. They also have something to say about their admirable magazine for young people, *The Wide Awake*, which is immensely popular wherever known, and which we have had on our clubbing list for several years. For 1887 the subscription price is reduced to \$2.40 per year.

BRADLEE WHIDDEN, Boston, has a list specially attractive to our readers: "American Wild-Flowers," which he claims is the "finest flower-book ever issued;" also works on botany, &c., in great numbers. We shall be glad to supply, at his lowest prices, his books to any of our readers.

Periodicals.

In the *Overland Monthly* the Pacific Coast States and Territories have a magazine very ably managed and edited. Its object is to develop the best and most characteristic literature of the West; to bring before the public some of the wealth of unmined literary material which that locality contains, and to help the growth and settlement of the Pacific Coast. It gives us glimpses of Californian life, of Sierra, mining-camps, of Coast Range blossoms, and besides these subjects deals with the industrial, economic and educational questions of the day.

The December *Harper's Magazine* is truly a Christmas number. A holiday tone prevails throughout, from its frontispiece, "When Christmas Comes," to the page illustration in the "Editor's Drawer." The leading article, entitled "The Boyhood of Christ," is written by the author of "Ben-Hur." William Hamilton Gibson describes and illustrates his experiences in the woodland recesses. An unusual number of short stories are given and the illustrated poems are specially attractive.

That sterling New York newspaper, the *New York Times*, invites the consideration of newspaper readers, and for 1887 promises to serve them no less faithfully than in the past. Its claim to be "the best American newspaper" may be disputed by other newspaper publishers, but it has readers who look upon it as the best production of American journalists.

A comparatively new, but very handsome magazine, the *Cosmopolitan*, published at Rochester, N. Y., presents its merits as a periodical and the useful premiums which it supplies to every subscriber.

The old-time favorite with the ladies, *Peterson's Magazine*, Philadelphia, has acquired a notable circulation in American homes, and its inducements for 1887 are outlined in another column.

Among the gems of literature for young readers, that favorite, *Our Little Ones and the Nursery*, is always bright and beautiful, its pages shine with beautiful illustrations and its reading matter is attractive to thousands of the little folk.

For over half a century the *New York Observer* has ministered to its large circle of readers in a way which has endeared it to them, and it remains in families for generations as a family friend.

New Farm. This is a sprightly monthly published at Embla, Md., at \$1 per annum. It is free from long, tiresome articles composed of words instead of ideas, and is loaded with rich, spicy notes of practical value to every American farmer.

Hardy Ornamental Trees and Shrubs. William Paul & Sons, Waltham Cross, Eng. Descriptive catalogue of all desirable kinds.

New York Botanical Garden Library



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